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BEFORE THE ARIZONA CORPORATION COMMISSION 27 P 4:16

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Chairman
JAMES M. IRVIN
Commissioner
MARC SPITZER
Commissioner

AZ CORP COMMISSION
DOCUMENT CONTROL

IN THE MATTER OF THE APPLICATION
OF QWEST CORPORATION FOR APPROVAL
OF AGREEMENT FOR LOCAL WIRELINE
NETWORK INTERCONNECTION AND
SERVICE RESALE WITH INTERNET
COMMERCE AND COMMUNICATIONS

DOCKET NO. T-01051B-01-0359

APPLICATION OF QWEST
CORPORATION FOR APPROVAL OF
AGREEMENT FOR LOCAL WIRELINE
NETWORK INTECONNECTION AND
SERVICE RESALE WITH INTERNET
COMMERCE AND COMMUNICATIONS

Qwest Corporation ("Qwest") hereby submits to the
Arizona Corporation Commission ("Commission") this Application
for Approval of the Agreement for Local Wireline Network
Interconnection and Service Resale ("Agreement") between Qwest
and Internet Commerce and Communications ("Internet"). In
support of this Application, Qwest states as follows:

I.

Qwest is a Colorado corporation and incumbent local
exchange carrier in Arizona.

II.

As of the date of this filing, Internet has not yet
applied for a certificate of convenience and necessity to provide
telecommunications service as an intrastate reseller.

III.

Internet and Qwest entered into the Agreement to
establish the rates, terms and conditions, for local
interconnection, local resale, and the purchase of unbundled

1 network elements. The Agreement was reached through voluntary
2 negotiations without resort to mediation or arbitration and is
3 submitted for approval pursuant to Section 252(e) of the
4 Communications Act of 1934, as amended by the Telecommunications
5 Act of 1996 ("Act"), and the requirements of A.A.C. R14-2-1506.
6 A copy of the Agreement is attached and incorporated as Exhibit
7 A.

8 IV.

9 The provisions of this Agreement have already been
10 approved by the Commission. Qwest and AT&T Communications of the
11 Mountain States, Inc. ("AT&T") previously filed an
12 interconnection agreement with the Commission, which was approved
13 on July 31, 1997, in Decision No. 60308. Internet has selected
14 and agreed to the terms, conditions and provisions of the AT&T
15 agreement as permitted under the Act. The Agreement between
16 Qwest and Internet, therefore, is essentially the same as the
17 AT&T agreement.

18 V.

19 Section 252(e) of the Act directs that a state
20 commission may reject an agreement reached through voluntary
21 negotiations only if the commission finds that:

22 A. The agreement (or a portion thereof) discriminates
23 against a telecommunications carrier not a party to the
24 agreement; or

25 B. The implementation of such agreement or portion is
26 not consistent with the public interest, convenience and

1 network elements. The Agreement was reached through voluntary
2 negotiations without resort to mediation or arbitration and is
3 submitted for approval pursuant to Section 252(e) of the
4 Communications Act of 1934, as amended by the Telecommunications
5 Act of 1996 ("Act"), and the requirements of A.A.C. R14-2-1506.
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14 and agreed to the terms, conditions and provisions of the AT&T
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16 Qwest and Internet, therefore, is essentially the same as the
17 AT&T agreement.

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20 commission may reject an agreement reached through voluntary
21 negotiations only if the commission finds that:

22 A. The agreement (or a portion thereof) discriminates
23 against a telecommunications carrier not a party to the
24 agreement; or

25 B. The implementation of such agreement or portion is
26 not consistent with the public interest, convenience and

1 necessity.

2 VI.

3 A.A.C. R14-2-1506(C)(1)(b) requires that the request
4 for approval of an interconnection agreement summarize the main
5 provisions of the agreement, set forth the parties' position as
6 to why the agreement should be adopted, state why the agreement
7 does not discriminate against non-party telecommunications
8 carriers, is consistent with the public interest, convenience and
9 necessity, and is consistent with applicable state law
10 requirements.

11 VII.

12 Pursuant to these requirements, the main provisions of
13 the Agreement are summarized as follows:

14 **Scope of Agreement.** The scope of this Agreement is
15 to specify the rights and obligations of Internet and Qwest with
16 respect to the purchase and sale of local interconnection, local
17 resale and network elements in the LATAs in Arizona where Qwest
18 operates.

19 **Terms and Conditions.** The Agreement includes a
20 number of standard contract provisions, e.g., general provisions,
21 most favored nation terms and treatment, payment, taxes,
22 intellectual property, severability, etc.

23 **Section 8. Branding.** This section specifies terms
24 and conditions for branding and unbranding services provided to
25 Internet.

26 ///

1 **Section 11. Publicity and Advertising.** Section 11
2 restricts publicity and advertising by either party that uses the
3 other party's logo, trademarks or service marks without obtaining
4 prior written approval from the other party.

5 **Section 20. Term of Agreement.** The agreement shall
6 become effective upon Commission approval and will expire on July
7 30, 2000; and thereafter shall continue in full force and effect
8 unless and until a new agreement, addressing all the terms of
9 this Agreement becomes effective between parties.

10 **Section 36. Physical Security.** Qwest will restrict
11 access to approved personnel to its buildings. The central
12 office supervisor will be the only Qwest employee with access to
13 Internet's collocation space. The parties will analyze security
14 procedures of each company to evaluate ways in which security
15 procedures may be enhanced.

16 **Section 37. Network Security.** Qwest will provide
17 an appropriate and sufficient back-up and recovery plan to be
18 used in the event of a system failure or emergency. Each party
19 will be responsible for the security arrangements on it side of
20 the network to the point of interconnection.

21 **Section 40. Collocation.** This section specifies
22 the terms and conditions for virtual and physical collocation.

23 **Section 42. Number Portability.** The parties will
24 provide Interim Number Portability on a reciprocal basis to the
25 extent technically feasible through remote cell forwarding,
26 direct inward dialing or other appropriate means until Permanent

1 Number Portability is implemented by the industry pursuant to the
2 regulations issued by the FCC or Commission. Requirements for
3 Permanent Number Portability (upon implementation pursuant to FCC
4 regulations) are provided in Section 42.2.

5 **Section 43. Dialing Parity.** The parties will provide
6 dialing parity to each other as required under Section 251(B)(3)
7 of the Act or state law or regulation as appropriate.

8 **Section 44. Directory Listings.** Section 44 pertains
9 to Directory Listings requirements for the appearance of Internet
10 end user directory listings in directory assistance service or
11 directory product.

12 **Section 47. Access to Poles, Ducts, Conduits and**
13 **Rights of Way.** Each party will provide the other party
14 nondiscriminatory access to poles, ducts, rights-of-way and
15 conduits it controls.

16 **Section 48. Bona Fide Request Process for Further**
17 **Unbundling.** Section 48 provides the terms and timetable for the
18 bona fide request process for interconnection or access to an
19 unbundled network element not already available via price lists,
20 tariff, or described in the Agreement.

21 **Section 49. Audit Process.** Either party may perform
22 up to three audits per 12-month period commencing with the
23 effective date. Either party may request an examination into a
24 specific element of or process where a dispute has been raised
25 concerning services performed by the other party. Either party
26 may conduct only a total of nine examinations and audits per

1 year.

2 **Section 50. Miscellaneous Services.** Requirements
3 for the provision of basic 911 and E911; routing of directory
4 assistance calls; provision of operator services; Qwest's
5 directory assistance and listings service request process; and
6 access to customer records used by Qwest to create and maintain
7 databases for the provision of directory assistance are provided
8 in Section 50.

9 **Section 51. Unused Transmission Media.** Qwest is not
10 required to provide unused transmission media, other than dark
11 fiber, however, Internet may, subject to agreement of Qwest,
12 lease copper twisted pairs, coaxial cable or other unused
13 transmission media. Requirements specific to dark fiber are
14 provided in Section 51.4.

15 **Section 52. Service Standards.** In cases where
16 performance standards are not specified in this Agreement and
17 Attachment 5, Qwest will provide all local resale, ancillary
18 functions, network elements or combinations in accordance with
19 performance standards which are at least equal to the level of
20 performance standards and/or quality of service requirements
21 imposed by the Commission, whichever is higher.

22 **Attachment 1. Rates and Charges.** Customer transfer
23 charges for resale customers switching to Internet, charges for
24 construction costs, and loop conditioning charges are referred in
25 Attachment 1. Except for certain specified exclusions, Qwest's
26 telecommunications services will be available for resale at

1 currently established discount rates for basic business and basic
2 residential line telecommunications services. For these
3 services, the discount rate will remain in effect until
4 exhaustion of all appeals of the Commission final order in Docket
5 Nos. U-3021-96-448, et al. Such interim wholesale discount is
6 subject to true up upon establishment of permanent rates. Interim
7 rates for interconnection, unbundled network elements, ancillary
8 services, and reciprocal compensation are provided in Schedule 1
9 to Attachment 1.

10 **Attachment 2. Resale.** Attachment 2 describes the
11 services Qwest will make available to Internet for resale and
12 outlines requirements for provision of those services.

13 **Attachment 3. Unbundled Access/Elements.** The
14 parameters of the provision of unbundled network elements to
15 Internet by Qwest are described in Attachment 3. Under the
16 Agreement, Qwest will offer each network element individually and
17 in combinations to permit Internet to combine those elements
18 obtained from Qwest or with network components provided by itself
19 or by third parties to provide telecommunications services to its
20 subscribers. Internet may purchase unbundled network elements
21 individually or in combinations without restrictions as to how
22 those elements may be rebundled.

23 **Attachment 4. Interconnection.** Attachment 4 provides
24 terms and conditions for the physical linking of the Internet and
25 Qwest networks for the mutual exchange of traffic. The agreement
26 allows for interconnection provided by virtual or physical

1 Mr. Charles R. Eazor
2 VP/GM Voice Solutions
3 Internet Commerce and Communications
4 7100 East Bellevue, Suite 201
5 Greenwood Village, CO 80111
6 (303)-414-7251

7 Timothy Berg
8 Theresa Dwyer
9 Fennemore Craig
10 3003 North Central Ave., Suite 2600
11 Phoenix, AZ 85012
12 (602)-916-5000
13 Attorneys for Qwest Corporation

14
15 CONCLUSION

16 For the foregoing reasons, Qwest respectfully requests
17 that the Commission expeditiously process this matter without a
18 hearing and issue an Order granting the Application in its
19 entirety.

20 DATED this 26th day of April 2001.

21 FENNEMORE CRAIG, P.C.

22 By 

23 Timothy Berg
24 Theresa Dwyer
25 Darcy Renfro
26 3003 North Central, Suite 2600
Phoenix, Arizona 85012
Attorneys for Qwest Corporation

1 ORIGINAL and 10 copies of the foregoing
2 hand-delivered for filling this 27 day of
April, 2001, to:

3 Docket Control
4 ARIZONA CORPORATION COMMISSION
5 1200 West Washington
6 Phoenix, AZ 85007

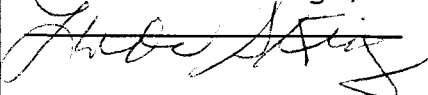
7 Copy of the foregoing hand-delivered
8 This 27 day of April, 2001, to:

9 Chris Kempley, Chief Counsel
10 ARIZONA CORPORATION COMMISSION
11 Legal Division
12 1200 West Washington
13 Phoenix, AZ 85007

14 Deborah H. Scott, Director
15 ARIZONA CORPORATION COMMISSION
16 Utilities Division
17 1200 West Washington
18 Phoenix, AZ 85007

19 Copy of the foregoing mailed
20 this 27 day of April, 2001, to:

21 Mr. Charles R. Eazor
22 VP/GM Voice Solutions
23 Internet Commerce and Communications
24 7100 East Belleview, Suite 201
25 Greenwood Village, CO 80111

26 

PHX/1178419.1/67817.179

January 12, 2001

Mr. Charles R. Eazor, VP/GM
Internet Commerce and Communications
7100 East Bellevue, Suite 201
Greenwood Village, CO 80111



Mr. Eazor:

We have received your request that, under Section 252(i) of the Telecommunications Act of 1996, Internet Commerce and Communications ("CLEC"), a Delaware corporation, wishes to "Pick and Choose" in its entirety, the terms of the Interconnection Agreement and any associated amendments, if applicable, ("Agreement") between AT&T Communications of the Mountain States, Inc. and Qwest Corporation (f/k/a U S WEST Communications, Inc.) ("Qwest"), a Colorado corporation, that was approved by the Commission as an effective agreement in the State of Arizona. We understand you have a copy of the Agreement.

With respect to the aforementioned Agreement, Qwest and CLEC (" the Parties") understand and agree:

1. The Parties shall request the Commission to expedite its review and approval of this Agreement. This Agreement shall become effective upon such approval.
2. Notwithstanding the mutual commitments set forth herein, the Parties are entering into this Agreement without prejudice to any positions they have taken previously, or may take in the future, in any legislative, regulatory, or other public forum addressing any matters, including those relating to the types of arrangements contained in this Agreement. During the proceeding in which the Commission is to review and approve the Agreement, Qwest may point out that it has objected, and continues to object, to the inclusion of the terms and conditions to which it objected in the proceedings involving the approval of the Underlying Agreement.
3. This Agreement contains provisions based upon the decisions and orders of the FCC and the Commission under and with respect to the Act. Currently, court and regulatory proceedings affecting the subject matter of this Agreement are in various stages, including the proceedings where certain of the rules and regulations of the FCC are being challenged. In addition, there is uncertainty in the aftermath of the Supreme Court's decision in AT&T Corp, et al. v. Iowa Utilities Board. Based on that uncertainty, and the regulatory and judicial proceedings which will occur as a result of that decision, the Parties acknowledge that this Agreement may need to be changed to reflect any changes in law. The Agreement has not been corrected to reflect the requirements, claims or outcomes of any of the proceedings. Accordingly, when a final, decision or decisions are made in the proceedings that automatically change and modify the Underlying Agreement, then like changes and modifications will similarly be made to this Agreement. In addition, to the extent rules or laws are based on regulatory or judicial proceedings as a result of the recent Supreme Court decision, this Agreement will be amended to incorporate such changes. In the event of a Commission ruling in a generic cost docket that results in changes to the rates contained in this Agreement, the Agreement shall be automatically modified to reflect such change in rates.
4. Subsequent to the execution of this Agreement, the FCC or the Commission may issue decisions or orders that change or modify the rules and regulations governing implementing of the Act. If such changes or modifications alter the state of the law upon which the Underlying Agreement was negotiated

and agreed, and it reasonably appears that the parties to the Underlying Agreement would have negotiated and agreed to different term(s) condition(s) or covenant(s) than as contained in the Underlying Agreement had such change or modification been in existence before execution of the Underlying Agreement, then this Agreement shall be amended to reflect such different terms(s), condition(s), or covenant(s). Where the Parties fail to agree upon such an amendment, it shall be resolved in accordance with the Dispute Resolution provision of the Underlying Agreement which is being adopted pursuant to Section 252(i).

5. This Agreement shall continue in force and effect through the initial term of the Underlying Agreement. Thereafter, this Agreement can be terminated by either Party on thirty (30) days written notice, if another Interconnection Agreement will not replace the current Agreement. If there is a replacement Interconnection Agreement, one Party can notify the other Party that it is requesting Section 251/252 negotiations under the Federal Telecommunications Act of 1996 ("Act"). That notification will trigger the timeframes and procedures contained in Section 252 of the Act, or pursuant to the timeframes set forth by the appropriate state commission. In the event of such notice, the arrangements between our companies shall continue and be governed by the terms of the expired agreement until the new agreement is approved by the appropriate state commission.

6. This Agreement shall be interpreted in accordance with GTE Service Corp. v. Federal Communications Commission, No. 99-1176 (D.C. Cir. March 17, 2000). The Parties shall not be bound by any language in the Underlying Agreement, or any prior interpretation or performance under such language, that are inconsistent with the Court's decision in GTE Service Corp v. Federal Communications Commission. The Parties also recognize that certain provisions of the terms and conditions may be void or unenforceable as a result of the July 18, 1997 and October 14, 1997, decisions of the United States Eighth Circuit Court of Appeals. Additionally, this Agreement shall be interpreted in accordance with all other relevant judicial or regulatory decisions.

7. The Parties agree that Qwest's position has been, and continues to be, that Interconnection Agreements entered into pursuant to Sections 251 and 252 of the Act, including the reciprocal compensation provisions of those Agreements, apply only to local traffic. Local traffic is that traffic that originates and terminates in the same local calling area. Each company bears the burden of proof that the traffic being exchanged is in fact local in nature.

8. CLEC adopts the terms and conditions of the AT&T Communications of the Mountain States, Inc. Agreement for interconnection with Qwest and in applying the terms and conditions, agrees that Internet Commerce and Communications be substituted in place of " AT&T Communications of the Mountain States, Inc. " throughout the Agreement wherever the latter appears.

9. Qwest requests that notice to Qwest Corporation as may be required under the Agreement shall be provided as follows:

To: Qwest Corporation
Director Interconnection Compliance
1801 California Street, Room 2410
Denver, CO 80202

With copy to:
Qwest Corporation Law Department
Attention: General Counsel, Interconnection
1801 California Street, 38th Floor

Denver, CO 80202

CLEC requests that notice to CLEC as may be required under the Agreement shall be provided as follows:

To: Charles R. Eazor
VP/Gm Voice Solutions
Internet Commerce and Communications
7100 East Belleview, Suite 201
Greenwood Village, CO 80111
Phone: 303-414-7251

With Copy To:
General Counsel
Internet Commerce & Communications
999 18th St., Suite 2201
Denver, CO 80202

10. CLEC represents and warrants that it is a certified provider of local dialtone service in the State of Arizona, and that this Agreement will cover services in that state only.

Please sign all three original copies of this letter, and overnight them to Heidi Higer, 1801 California St, Suite 2410 - Denver, CO 80202 (Phone: 303-965-3029) by March 21, 2001. After March 21, 2001, Qwest may rescind its willingness to consider the Agreement's terms and conditions, and will consider that you have withdrawn from good faith negotiations.

Please note that Qwest will file this letter with the appropriate state commission for approval; however, some state commissions will not approve the letter until the CLEC is certified by the state commission. You may want to contact the appropriate state commission to determine the requisite filing guidelines.

Sincerely,

Patrick D. Holton 02/08/01

Qwest Corporation
Patrick D. Holton
Director of Wholesale
150 S. 5th Street, Suite 510
Minneapolis, MN 55402

I agree to all terms and conditions contained in this letter as indicated by my signature below:

Internet Commerce and Communications

CLEC Name

Charles R. Eazor

Signature

Charles R. Eazor

Name

Vice President & General Manager

Title

02/05/01

Date

OK/CSM

**AGREEMENT
FOR LOCAL WIRELINE NETWORK INTERCONNECTION
AND
SERVICE RESALE**

**Between
Internet Commerce and Communications
and
Qwest Corporation**

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Attachment 5	Business Process Requirements
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Attachment 7	Implementation Schedule

This Interconnection Agreement (this "Agreement") is entered into by and between Internet Commerce and Communications ("CLEC"), a Delaware corporation, and Qwest Corporation (f/k/a U S WEST Communications, Inc.) ("Qwest"), a Colorado corporation, to establish the rates, terms and conditions for local interconnection, local resale, and the purchase of unbundled network elements (individually referred to as the "service" or collectively as the "services").

RECITALS

WHEREAS, pursuant to this Agreement, CLEC and Qwest will extend certain arrangements to one another within each LATA in which they both operate within Arizona. This Agreement is a combination of agreed terms and terms imposed by arbitration under Section 252 of the Communications Act of 1934, as modified by the Telecommunications Act of 1996, the rules and regulations of the Federal Communications Commission, and the orders, rules and regulations of the Arizona Corporation Commission; and as such does not necessarily represent the position of either Party on any given issue; and

WHEREAS, the Parties wish to interconnect their local exchange networks in a technically and economically efficient manner for the transmission and termination of calls, so that subscribers of each can seamlessly receive calls that originate on the other's network and place calls that terminate on the other's network, and for CLEC's use in the provision of exchange access ("Local Interconnection"); and

WHEREAS, CLEC wishes to purchase Telecommunications Services for resale to others, and Qwest is willing to provide such services; and

WHEREAS, CLEC wishes to purchase on an unbundled basis Network Elements, Ancillary Services and Functions and additional features separately or in any Combination, and to use such services for itself or for the provision of its Telecommunications Services to others, and Qwest is willing to provide such services;

Now, therefore, in consideration of the terms and conditions contained herein, CLEC and Qwest hereby mutually agree as follows:

SCOPE OF AGREEMENT

A. This Agreement specifies the rights and obligations of each Party with respect to the purchase and sale of Local Interconnection, Local Resale and Network Elements in the LATAs in Arizona where Qwest operates.

B. In the performance of their obligations under this Agreement, the Parties shall act in good faith and consistently with the intent of the Act. Where notice, approval or similar action by a Party is permitted or required by any provision of this Agreement (including, without limitation, the obligation of the Parties to further negotiate the resolution of new or open issues under this Agreement) such action shall not be unreasonably delayed, withheld or conditioned.

C. Qwest will provide CLEC with at least the level of service quality or performance of obligations under this Agreement as Qwest provides itself or any other Person with respect to all Telecommunications Services, Local Interconnection, Services for Resale, and Network Elements as applicable and shall provide such level of service quality or performance of service obligations in accordance with the specific requirements agreed to in Attachment 5.

Part A

D. Qwest shall provide to CLEC Services for Resale that are equal in quality, subject to the same conditions (including the conditions in Qwest's effective tariffs which are not otherwise inconsistent with the terms and conditions contained herein), within the same provisioning time intervals that Qwest provides these services to itself, its Affiliates and others, including end users, and in accordance with any applicable Commission service quality standards, including standards the Commission may impose pursuant to Section 252 (e)(3) of the Act.

E. Each Network Element provided by Qwest to CLEC shall be at least equal in the quality of design, performance, features, functions, capabilities and other characteristics, including, but not limited to, levels and types of redundant equipment and facilities for power, diversity and security, that Qwest provides to itself, Qwest's own subscribers, to a Qwest Affiliate or to any other entity.

F. The Parties agree to work jointly and cooperatively in testing and implementing processes for pre-ordering, ordering, maintenance, provisioning and billing and in reasonably resolving issues which result from such implementation on a timely basis.

G. If a Party makes a change in its network which it believes will materially affect the interoperability of its network with that of the other Party, the Party making the change shall provide advance notice of such change to the other Party in accordance with applicable FCC or Commission regulations.

H. In accordance with Section 251(c)(5) of the Act and the rules and regulations established by the FCC and the Commission, the Parties shall provide reasonable notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or network, as well as of any other changes that would affect the interoperability of those facilities and networks.

I. Except as otherwise provided for in Section 8 of Attachment 2, Qwest shall not discontinue or refuse to provide any service required hereunder without CLEC's prior written agreement in accordance with Section 17 of this Part A of this Agreement, nor shall Qwest reconfigure, reengineer or otherwise redeploy its network in a manner which would materially impair CLEC's ability to offer Telecommunications Services in the manner contemplated by this Agreement, the Act or the FCC's rules and regulations. Qwest agrees that all obligations undertaken pursuant to this Agreement, including, without limitation, performance standards, intervals, and technical requirements are material obligations hereof and that time is of the essence.

DEFINITIONS

Certain terms used in this Agreement shall have the meanings set forth herein or as otherwise elsewhere defined throughout this Agreement. Other terms used but not defined herein will have the meanings ascribed to them in the Act and the FCC's rules and regulations.

"911 Service" means a universal telephone number which gives the public direct access to the Public Safety Answering Point (PSAP). Basic 911 service collects 911 calls from one or more local exchange switches that serve a geographic area. The calls are then sent to the correct authority designated to receive such calls.

"911 Site Administrator" is a person assigned by CLEC to establish and maintain 911 service location information for its subscribers.

"Access Services" refers to interstate and intrastate switched access and private line transport services.

"Act" means the Communications Act of 1934 (47 U.S.C. Section 151 et seq.), as amended by the Telecommunications Act of 1996, and as from time to time interpreted in the duly authorized rules and regulations of the FCC or by the Commission.

"ADSL" or "Asymmetrical Digital Subscriber Line" means a transmission technology which transmits an asymmetrical digital signal using one of several transmission methods (for example, carrier-less AM/PM discrete multi-tone, or discrete wavelet multi-tone).

"Affiliate" is an entity, as defined in the Act, that directly or indirectly owns or controls, is owned or controlled by, or is under common ownership or control with, another entity. For the purposes of this Agreement, "own" or "control" means to own an equity interest (or equivalent) of at least ten percent (10%), or the right to control the business decisions, management and policy of another entity performing any of the obligations set forth in this Agreement.

"AIN" ("Advanced Intelligent Network") is a network functionality that permits specific conditions to be programmed into a switch which, when met, directs the switch to suspend call processing and to receive special instructions for further call handling instructions in order to enable carriers to offer advanced features and services.

"AIN Services" means architecture and configuration of the AIN Triggers within the SCP as developed and/or offered by Qwest to its customers.

"ALI" (Automatic Location Identification) is a database developed for E911 systems that provides for a visual display of the caller's telephone number and address, and the names of the emergency response agencies responsible for that address. The ALI also shows an Interim Number Portability (INP) number, if applicable.

"ALI/DMS" (Automatic Location Identification/Data Management System) means the emergency service (E911/911) database containing subscriber location information (including name, address, telephone number, and sometimes special information from the local service provider) used to determine to which Public Safety Answering Point (PSAP) to route the call.

"AMA" means the Automated Message Accounting structure that initially records telecommunication message information. AMA format is contained in the Automated Message Accounting document, published by Bellcore as GR-1100-CORE, which defines the industry standard for message recording.

"Ancillary Services" or "Ancillary Functions" means, collectively, the following: (1) Collocation as described in Section 40; (2) access to poles, ducts, conduits and rights of way as described in Section 47; (3) unused transmission media as described in Section 51; (4) Directory Listings as described in Section 44; (5) E911 as described in Section 50.1; (6) Directory Assistance Service as described in Section 50.2; (7) Operator Services as described in Section 50.3; (8) Directory Assistance and Listings services requests as described in Section 50.4; and (9) directory assistance data as described in Section 50.5.

"ANI" (Automatic Number Identification) is a feature that identifies and displays the number of a telephone that originates a call.

Part A

"ARS" (Automatic Route Selection) is a service feature that provides for automatic selection of the least expensive or most appropriate transmission facility for each call based on criteria programmed into the system.

"ASR" (Access Service Request) means the industry standard forms and supporting documentation used for ordering Access Services. The ASR may be used to order trunking and facilities between CLEC and Qwest for Local Interconnection.

"BLV/BLI" (Busy Line Verify/Busy Line Interrupt) means an operator call in which the end user inquires as to the busy status of, or requests an interruption of, a telephone call.

"Business Day" means any day Monday through Friday except for mutually agreed to holidays.

"CABS" means the Carrier Access Billing System which is defined in a document prepared by the Billing Committee of the OBF. The Carrier Access Billing System document is published by Bellcore in Volumes 1, 1A, 2, 3, 3A, 4 and 5 as Special Reports SR-OPT-001868, SR-OPT-001869, SR-OPT-001871, SR-OPT-001872, SR-OPT-001873, SR-OPT-001874, and SR-OPT-001875, respectively, and contains the recommended guidelines for the billing of access and other connectivity services.

"Calling Party Number" or "CPN" is a CCS parameter which refers to the number transmitted through a network identifying the calling party.

"CCS" (Common Channel Signaling) means a method of digitally transmitting call set-up and network control data over a digital signaling network fully separate from the public switched telephone network that carries the actual call.

"Central Office Switch" means a switch used to provide Telecommunications Services, including, but not limited to:

- (a) "End Office Switches" which are used to terminate Customer station loops for the purpose of interconnecting to each other and to trunks;
- (b) "Tandem Office Switches" which are used to connect and switch trunk circuits between and among other Central Office Switches. Access tandems provide connections for exchange access and toll traffic while local tandems provide connections for local/EAS traffic; or
- (c) Combination End Office/Tandem Office Switches.

"Centrex", including Centrex Plus, means a Telecommunications Service that uses central office switching equipment for call routing to handle direct dialing of calls and to provide numerous private branch exchange-like features.

"Charge Number" is a CCS parameter which refers to the number transmitted through the network identifying the billing number of the calling party.

Part A

"CLASS" (Bellcore Service Mark) is a set of call-management service features that utilize the capability to forward a calling party's number between end offices as part of call setup. Features include Automatic Callback, Automatic Recall, Caller ID, Call Trace, and Distinctive Ringing.

"CLEC" means Internet Commerce and Communications and any Affiliates, subsidiary companies or other entities performing any of the obligations of CLEC set forth in this Agreement.

"Combinations" means provision by Qwest of two or more connected Network Elements ordered by CLEC to provide its Telecommunication Services in a geographic area or to a specific subscriber and that are placed on the same or related order by CLEC, subject to restrictions, if any, imposed by the Commission.

"Commission" means the Arizona Corporation Commission.

"Competitive Local Exchange Carrier" or "CLEC" means an entity authorized to provide Local Exchange Service that does not otherwise qualify as an incumbent LEC.

"Conduit" means a tube or protected pathway that may be used to house communication or electrical cables. Conduit may be underground or above ground (for example, inside buildings) and may contain one or more innerducts.

"Confidential Information" has the meaning set forth in Section 28 of Part A of this Agreement.

"Contract Year" means a twelve (12) month period during the term of this Agreement commencing on the Effective Date and each anniversary thereof.

"Control Office" is an exchange carrier center or office designated as its company's single point of contact for the provisioning and maintenance of its portion of local interconnection arrangements.

"Custom Calling Features" is a set of call-management service features available to residential and business subscribers including call-waiting, call-forwarding and three-party calling.

"Customer" means a third-party (residence or business) that subscribes to Telecommunications Services provided by either of the Parties.

"DBMS" (Database Management System) is a computer system used to store, sort, manipulate and update the data required to provide, for example, selective routing and ALI.

"Databases" are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular service and/or capability. Databases include, but are not limited to: Number Portability, LIDB, Toll Free Number Database, Automatic Location Identification/Data Management System, and AIN.

Part A

"Digital Signal Level" means one of several transmission rates in the time division multiplexing hierarchy, including, but not limited to:

"Digital Signal Level 0" or "DS-0" means the 56 or 64 Kbps zero-level signal in the time-division multiplex hierarchy.

"Digital Signal Level 1" or "DS-1" means the 1.544 Mbps first-level signal in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS-1 is the initial level of multiplexing.

"Digital Signal Level 3" or "DS-3" means the 44.736 Mbps third-level in the time-division multiplex hierarchy. In the time-division multiplexing hierarchy of the telephone network, DS-3 is defined as the third level of multiplexing.

"Directory Assistance Database" refers to any set of subscriber records used by Qwest in its provision of live or automated operator-assisted directory assistance including, but not limited to, 411, 555-1212, NPA-555-1212.

"Directory Assistance Service" provides Listings to callers. Directory Assistance Service may include the option to complete the call at the caller's direction.

"Directory Listings" or "Listings" refers to subscriber information, including, but not limited to, name, address and phone numbers, in Directory Assistance Service or directory products.

"Discloser" means that Party to this Agreement which has disclosed Confidential Information to the other Party.

"E911" (Enhanced 911 Service) means a telephone communication service which will automatically route a call dialed "911" to a designated Public Safety Answering Point (PSAP) attendant and will provide to the attendant the calling party's telephone number and, when possible, the address from which the call is being placed, and the emergency response agencies responsible for the location from which the call was dialed.

"E911 Message Trunk" is a dedicated line, trunk or channel between two central offices or switching devices which provides a voice and signaling path for E911 calls.

"Extended Area Service" ("EAS") is intraLATA traffic treated as "local" traffic between exchanges (rather than as "toll" traffic) as established by the Commission and as reflected in the effective Qwest tariffs.

"Effective Date" is the date, indicated in the Preamble, on which this Agreement shall become effective.

"Emergency Response Agency" is a governmental entity authorized to respond to requests from the public to meet emergencies.

"EMR" means the Exchange Message Record System used among LECs for exchanging telecommunications message information for billable, non-billable, sample, settlement and study data. EMR format is contained in BR-010-200-010 CRIS Exchange Message Record, published by Bellcore, which defines the industry standard for exchange message records.

Part A

"ESN" (Emergency Service Number) is a number assigned to the ALI and selective routing databases for all subscriber telephone numbers. The ESN designates a unique combination of fire, police and emergency medical service response agencies that serve the address location of each in-service telephone number.

"FCC" means the Federal Communications Commission.

"FCC Interconnection Order" is the Federal Communications Commission's First Report and Order in CC Docket No. 96-98 released August 8, 1996, as effective.

"Fiber-Meet" means an interconnection architecture method whereby the Parties physically interconnect their networks via an optical fiber interface (as opposed to an electrical interface) at a mutually agreed upon location.

"Gateway" (ALI Gateway) is a telephone company computer facility that interfaces with CLEC's 911 administrative site to receive Automatic Location Identification (ALI) data from CLEC. Access to the Gateway will be via a dial-up modem using a common protocol.

"HDSL" or "High-Bit Rate Digital Subscriber Line" means a two-wire or four-wire transmission technology which typically transmits a DS-1-level signal (or, higher level signals with certain technologies), using, for example, 2 Binary/1 Quaternary ("2B1Q").

"ILEC" means the incumbent local exchange carrier.

"Information Service Traffic" means traffic which originates on a local access line and which is addressed to an information service provider.

"INP" (Interim Number Portability) is a service arrangement whereby subscribers who change local service providers may retain existing telephone numbers with minimal impairment of quality, reliability, or convenience when remaining at their current location or changing their location within the geographic area served by the initial carrier's serving central office.

"Integrated Digital Loop Carrier" ("IDLC") means a digital subscriber loop carrier system which interfaces with the switch digitally at a DS-1 (1.544Mbps) or higher level.

"Integrated Services Digital Network" or "ISDN" means a switched network service that provides end-to-end digital connectivity for the simultaneous transmission of voice and data. Basic Rate Interface-ISDN (BRI-ISDN) provides for a digital transmission of two 64 Kbps bearer channels and one 16 Kbps data channel (2B+D). Primary Rate Interface-ISDN (PRI-ISDN) provides for a digital transmission of twenty-three (23) 64 Kbps bearer channels and one 64 Kbps data channel (23B+D).

"Interconnection" is as described in the Act and refers to the connection of separate pieces of equipment, facilities, or platforms between or within networks for the purpose of transmission and routing of telephone exchange service traffic and exchange access traffic.

"IXC" (Interexchange Carrier) means a provider of interexchange Telecommunications Services.

"LATA" means Local Access Transport Area.

"LEC" means local exchange carrier.

"LIDB" (Line Information Data Base(s)) is a SCP database that provides for such functions as calling card validation for telephone line number cards issued by LECs and other entities and validation for collect and billed-to-third services.

"Local Interconnection" shall have the meaning set forth in the Recitals to this Agreement.

"Local Resale," "Services for Resale" or "Resale Services" means, collectively, Telecommunications Services and service functions provided by Qwest to CLEC pursuant to Attachment 2 of this Agreement.

"Local Traffic" is intraLATA traffic within an exchange that is treated as toll free traffic as established by the Commission and as reflected in the effective tariffs of Qwest.

"Loop" is a transmission facility between a distribution frame, or its equivalent, in a Qwest central office or wire center, and the Network Interface Device (as defined herein) or network interface at a subscriber's premises, to which CLEC is granted exclusive use. This includes, but is not limited to, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL, and DS-1 level signals. A Loop may be composed of the following components:

- Loop Concentrator/Multiplexer
- Loop Feeder
- Network Interface Device (NID)
- Distribution

"Main Distribution Frame" or "MDF" means the distribution frame of the Party providing the Loop used to interconnect cable pairs and line and trunk equipment terminals on a switching system or transmission facility.

"MECAB" refers to the Multiple Exchange Carrier Access Billing (MECAB) document prepared by the Billing Committee of the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS). The MECAB document, published by Bellcore as Special Report SR-BDS-000983, contains the recommended guidelines for the billing of an Access Service provided by two or more LECs (including a LEC and a CLEC), or by one LEC in two or more states within a single LATA.

"MECOD" refers to the Multiple Exchange Carriers Ordering and Design (MECOD) Guidelines for Access Services - Industry Support Interface, a document developed by the Ordering/Provisioning Committee under the auspices of the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS). The MECOD document, published by Bellcore as Special Report SR STS-002643, establishes recommended guidelines for processing orders for Access Service which is to be provided by two or more LECs (including a LEC and a CLEC). It is published by Bellcore as SRBDS 00983.

"Meet-Point Billing" or "MPB" refers to an arrangement whereby two LECs (including a LEC and CLEC) jointly provide Switched Access Service to an Interexchange Carrier, with each LEC (or CLEC) receiving an appropriate share of the access element revenues.

"Mid-Span Meet" is a point of interconnection between two networks, designated by two Telecommunications Carriers, at which one carrier's responsibility for service begins and the other carrier's responsibility ends.

"MSAG" (Master Street Address Guide) is a database defining the geographic area of an E911 service. It includes an alphabetical list of the street names, high-low house number ranges, community names, and emergency service numbers provided by the counties or their agents to Qwest.

"North American Numbering Plan" or "NANP" means the numbering plan used in the United States that also serves Canada, Bermuda, Puerto Rico and certain Caribbean Islands. The NANP format is a 10-digit number that consists of a 3-digit NPA code (commonly referred to as the area code), followed by a 3-digit NXX code and 4-digit line number.

"NENA" (National Emergency Number Association) is an association with a mission to foster the technological advancement, availability and implementation of 911 nationwide.

"Network Element" means a facility or equipment used in the provision of a Telecommunications Service including all features, functions and capabilities embedded in such facility or equipment.¹

"NP" (Number Portability) means the use of the Location Routing Number (LRN) database solution to provide fully transparent NP for all subscribers and all providers without limitation.

"NPA" (Numbering Plan Area) (sometimes referred to as an area code) is the three digit indicator which is designated by the first three digits of each 10-digit telephone number within the NANP. Each NPA contains 792 possible NXX Codes. There are two general categories of NPA, "geographic NPAs" and "Non-Geographic NPAs." A "Geographic NPA" is associated with a defined geographic area, and all telephone numbers bearing such NPA are associated with services provided within that geographic area. A "Non-Geographic NPA," also known as a "Service Access Code (SAC Code)" is typically associated with a specialized Telecommunications Service which may be provided across multiple geographic NPA areas; 500, 800, 900, 700, and 888 are examples of Non-Geographic NPAs.

"NXX" means the fourth, fifth and sixth digits of a ten-digit telephone number within the North American Numbering Plan.

"OBF" means the Ordering and Billing Forum, which functions under the auspices of the Carrier Liaison Committee (CLC) of the Alliance for Telecommunications Industry Solutions (ATIS).

"Operator Services" includes, but is not limited to, (1) operator handling for call completion (e.g., collect calls); (2) operator or automated assistance for billing after the subscriber has dialed the called number (e.g., credit card calls); and (3) special services (e.g., BLV/BLI, emergency agency call).

"Operator Systems" is the Network Element that provides operator and automated call handling with billing, special services, subscriber telephone listings, and optional call completion services.

¹ AT&T Order, page 11, Issue 18 and MCI Order at p. 24.

"P.01 Transmission Grade of Service (GOS)" means a trunk facility provisioning standard with the statistical probability of no more than one call in 100 blocked on initial attempt during the average busy hour.

"PLU" (Percent Local Usage) is a calculation which represents the ratio of the local minutes to the sum of local and intraLATA toll minutes between exchange carriers sent over Local Interconnection trunks. Directory assistance, BLV/BLI, 900, 976, transiting calls from other exchange carriers and switched access calls are not included in the calculation of PLU.

"Party" means either Qwest or CLEC and "Parties" means Qwest and CLEC.

"Person" means, collectively, an Affiliate, subsidiary, Customer, end user and subscriber of Qwest.

"Point of Interconnection" or "POI" means the physical point that establishes the technical interface, the test point, where applicable, and the operational responsibility hand-off between CLEC and Qwest for the local interconnection of their networks for the mutual exchange of traffic.

"Point of Interface" is the physical point where CLEC hands off transmission media to the Qwest provided entrance facility associated with a collocation arrangement for the purpose of connecting the entrance facility to some point located within Qwest's premises.

"Pole Attachment" means the connection of a facility to a utility pole. Some examples of facilities are mechanical hardware, grounding and transmission cable, and equipment boxes.

"POP" means an IXC's point of presence.

"Port" means a termination on a Central Office Switch that permits Customers to send or receive Telecommunications Services over the public switched network, including switch features or switching functionality.²

"Premium Listing", such as additional, foreign, cross reference, informational, non-listed, privacy, etc. are as described in the Qwest general exchange Listing tariff.

"Primary Listing" (for example, main list, additional main, joint user, client main list or answering service list) shall mean the one appearance of an end user telephone subscriber's main telephone number and other content such as name and address, which each CLEC residence or business subscriber is entitled to receive in the white pages directory published by Qwest Dex at no charge from Qwest Corporation. Where Qwest business end users are entitled to receive a courtesy Listing in the yellow pages section of any directory published on Qwest's behalf, CLEC's business customers will receive the same entitlement.

"Proprietary Information" shall have the same meaning as Confidential Information.

"PSAP" (Public Safety Answering Point) is the public safety communications center where 911 calls placed by the public for a specific geographic area will be answered.

² AT&T Order, page 11, Issue 18 and MCI Order at p. 24.

Part A

"Qwest" means Qwest Corporation and any Affiliates, subsidiary companies or other entities performing any of the obligations of Qwest set forth in this Agreement.

"Rate Center" means the geographic point and corresponding geographic area which are associated with one or more particular NPA-NXX codes which have been assigned to Qwest or CLEC for its provision of basic exchange Telecommunications Services. The "Rate Center Point" is the finite geographic point identified by a specific V&H coordinate, which is used to measure distance-sensitive end user traffic to/from the particular NPA-NXX designations associated with the specific Rate Center. The "Rate Center Area" is the exclusive geographic area identified as the area within which Qwest or CLEC will provide basic exchange Telecommunications Services bearing the particular NPA-NXX designations associated with the specific Rate Center. The Rate Center Point must be located within the Rate Center Area.

"Rating Point" means the point at which transport mileage is calculated for the termination of calls. Each Party shall establish its own Rating Point(s) for its own services.

"Real Time" means the actual time in which an event takes place, with the reporting on or the recording of the event simultaneous with its occurrence.

"Recipient" means that Party to this Agreement (1) to which Confidential Information has been disclosed by the other Party, or (2) who has obtained Confidential Information in the course of providing services under this Agreement.

"Reseller" is a category of Telecommunications Services providers who obtain Telecommunications Services from another provider through the purchase of wholesale priced services for resale to their end user subscribers.

"Routing Point" means a location which Qwest or CLEC has designated on its own network as the homing (routing) point for traffic inbound to basic exchange Telecommunications Services provided by Qwest or CLEC which bear a certain NPA-NXX designation. The Routing Point is employed to calculate mileage measurements for the distance-sensitive transport element charges of Switched Access Services. Pursuant to Bellcore Practice BR 795-100-100, the Routing Point may be an "End Office" location, or a "LEC Consortium Point of Interconnection." Pursuant to that same Bellcore Practice, examples of the latter shall be designated by a common language location identifier (CLLI) code with (x)KD in positions 9, 10, 11, where (x) may be any alphanumeric A-Z or 0-9. The Routing Point need not be the same as the Rate Center Point, nor must it be located within the Rate Center Area, but must be in the same LATA as the NPA-NXX.

"ROW" (Right of Way) means the right to use the land or other property owned, leased, or controlled by another party to place poles, conduits, cables, other structures and equipment, or to provide passage to access such structures and equipment. A ROW may run under, on, or above public or private property (including air space above public or private property) and may include the right to use discrete space in buildings, building complexes or other locations.

"SAG" (Street Address Guide) is a database containing an alphabetical list of street names, high-low house number ranges, descriptive addresses, community names, tax codes, subscriber names, telephone numbers, NXXs, central office names, CLLI and other information maintained by Qwest.

Part A

"SECAB" means the Small Exchange Carrier Access Billing document prepared by the Billing Committee of the OBF. The Small Exchange Carrier Access Billing document, published by Bellcore as Special Report SR OPT-001856, contains the recommended guidelines for the billing of access and other connectivity services.

"Selective Routing" is a service which automatically routes an E911 call to the PSAP that has jurisdictional responsibility for the service address of the telephone from which 911 is dialed, irrespective of telephone company exchange or wire center boundaries.

"Service Control Point" or "SCP" is a specific type of Database Network Element functionality deployed in a Signaling System 7 (SS7) network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network. SCPs also provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data (e.g., a toll free database stores subscriber record data that provides information necessary to route toll free calls).

"Signaling Transfer Points" or "STPs" provide functionality that enable the exchange of SS7 messages among and between switching elements, database elements and Signaling Transfer Points.

"Switch" -- See Central Office Switch.

"Switched Access", "Switched Access Service", "Switched Exchange Access Service" or "Switched Access Traffic" are as defined in the Parties' applicable tariffs.

"Tandem Office Switches" are Class 4 switches which are used to connect and switch trunk circuits between and among End Office Switches and other tandems.

"Tariff Services" as used throughout this Agreement refers to the applicable Party's interstate tariffs and state tariffs, price lists, price schedules and catalogs.

"Technically Feasible" refers solely to technical or operational concerns, rather than economic, space, or site considerations, in accordance with the rules and regulations of the FCC and the Commission.

"Telecommunications" means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

"Telecommunications Carrier" means any provider of Telecommunications Services, except that such term does not include aggregators of Telecommunications Services (as defined in Section 226 of the Act). A Telecommunications Carrier shall be treated as a common carrier under the Act only to the extent that it is engaged in providing Telecommunications Services, except that the Commission shall determine whether the provision of fixed and mobile satellite service shall be treated as common carriage.

"Telecommunications Services" means the offering of Telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

"Toll Traffic" is traffic that originates in one Rate Center and terminates in another Rate Center with the exception of traffic that is rated as EAS.

"Transit Service" provides the ability for a Telecommunications Carrier to use its connection to a local or access tandem for delivery of calls that originate with a Telecommunications Carrier and terminate to a company other than the tandem company, such as another Competitive Local Exchange Carrier, an existing LEC, or a wireless carrier. In these cases, neither the originating nor terminating end user is a customer of the tandem Telecommunications Carrier. The tandem Telecommunications Carrier will accept traffic originated by a Party and will terminate it at a Point of Interconnection with another local, intraLATA or interLATA network Telecommunications Carrier. This service is provided through local and access tandem switches.

"Transit Traffic" is any traffic, other than Switched Access Traffic, that originates from one Telecommunications Carrier's network, transits another Telecommunications Carrier's network, and terminates to yet another Telecommunications Carrier's network.

"TRCO" means Trouble Reporting Control Office.

"Voluntary Federal Subscriber Financial Assistance Programs" are Telecommunications Services provided to low-income subscribers, pursuant to requirements established by the appropriate federal or state regulatory body.

"Wire Center" denotes, for the purposes of collocation, a building or space within a building, that serves as an aggregation point on a given carrier's network, where transmission facilities and circuits are connected or switched. Wire Center can also denote a building where one or more central offices, used for the provision of Telecommunications Services and Access Services, are located. Wire Center shall mean those points eligible for such connections as specified in the FCC Docket No. 91-141, and rules adopted pursuant thereto.

TERMS AND CONDITIONS

1. General Provisions

- 1.1 Each Party is individually responsible to provide facilities within its network which are necessary for routing, transporting, measuring, and billing traffic from the other Party's network and for delivering such traffic to the other Party's network in the standard format compatible with CLEC's network and to terminate the traffic it receives in that standard format or the proper address on its network. The Parties are each solely responsible for participation in and compliance with national network plans, including the National Network Security Plan and the Emergency Preparedness Plan.
- 1.2 Neither Party shall impair the quality of service to other carriers or to either Party's Customers, and each Party may discontinue or refuse service if the other Party violates this provision. Upon such violation, either Party shall provide the other Party notice of such violation, at the earliest practicable time.
- 1.3 Each Party is solely responsible for the services it provides to its Customers and to other Telecommunications Carriers.
 - 1.3.1 The Parties recognize that equipment vendors may manufacture telecommunication equipment that does not fully incorporate and may deviate from industry standards referenced in this Agreement. Due to the manner in which

individual equipment manufacturers have chosen to implement industry standards into the design of their products, along with differing vintages of individual facility components and the presence of embedded technologies pre-dating current technical standards, some of the individual facility components deployed within Qwest's network, including, without limitation, Network Elements and associated business processes and the standards associated with the equipment providing such Network Elements (collectively, "Network Components"), may not adhere to all the specifications set forth and described in the Bellcore, ANSI, ITU and other technical and performance standards outlined in this Agreement. Within forty-five (45) days after the Effective Date of this Agreement, the Parties will develop processes by which Qwest will inform CLEC of deviations or planned deviations, and the implementation date of such planned deviations, from standards referenced in this Agreement for Network Components that may be ordered by CLEC. In addition, the Parties agree that those deviations from such standards documented by Qwest to CLEC shall, to the extent permitted by FCC and Commission rules and regulations, supersede sections of this Agreement referencing technical standards otherwise applicable for the affected Network Elements.

- 1.3.2 Qwest agrees that in no event shall it intentionally allow any Network Component provided by Qwest to CLEC under this Agreement to perform below the standards or deviations therefrom reflected in Section 1.3.1, except where requested by CLEC. Qwest shall minimize any degradation to its equipment relative to currently applicable service, where reasonable in view of industry adopted performance standards and technological developments. Written notice (the "Change Notice") of any planned changes in standards for any Network Component which could impact that Network Component will be provided at least ninety (90) days (or at the make/buy point) prior to the planned implementation. If CLEC notifies Qwest of how the proposed change may adversely impact CLEC or its Customers within fourteen (14) calendar days after receipt of Qwest's Change Notice, Qwest and CLEC will schedule joint discussions to address and attempt to resolve the matter, including, without limitation, consideration of proposed alternatives. In addition, if Qwest learns that any Network Component purchased by CLEC under this Agreement has been permitted (even if not intentionally) to fall materially below the level or specification in effect as of the Effective Date of this Agreement, Qwest shall inform CLEC immediately.
- 1.3.3 The Parties recognize that providing a number of the services specified in this Agreement depends upon the "technical feasibility" of providing that service, as that term is defined under the Act and/or by FCC or Commission rules and decisions. If the Parties cannot agree on whether providing a service is technically feasible, the matter, including cost and expenses (if any), shall be resolved through good faith negotiation or the dispute resolution process outlined in this Agreement.

2. Most Favored Nation Terms and Treatment

- 2.1 Until such time as there is a final court determination interpreting Section 252(j) of the Act, Qwest shall make available to CLEC the terms and conditions of any other agreement for Interconnection, unbundled Network Elements and resale services**

approved by the Commission under Section 252 of the Act, in that agreement's entirety. After there is a final court determination interpreting Section 252(i) of the Act, the Parties agree to revise this Section 2.1 to reflect such interpretation.³

3. Payment

- 3.1 In consideration of the services provided by Qwest under this Agreement, CLEC shall pay the charges set forth in Attachment 1 to this Agreement. The billing procedures for charges incurred by CLEC hereunder are set forth in Attachment 5 to this Agreement.
- 3.2 Amounts payable under this Agreement, unless reasonably disputed, are due and payable within thirty (30) days after the date of Qwest's invoice or within twenty (20) days after receipt of the invoice, whichever is later. If the payment due date is not a Business Day, the payment shall be made the next Business Day.
- 3.3 A late payment charge of 1.5% applies to all billed balances, not reasonably disputed, which are not paid within the applicable time period set forth in Section 3.2 above. To the extent CLEC pays the billed balance on time, but the amount of the billed balance is reasonably disputed by CLEC, and, it is later determined that a refund is due CLEC, interest shall be payable on the refunded amount in the amount of 1.5% per month. To the extent CLEC pays the billed balance on time, but the amount of the billed balance is reasonably disputed by CLEC, and, it is later determined that no refund is due CLEC, no interest shall be payable on the disputed amount.
- 3.4 Late payment charges shall not be used as a "credit" to a deposit, if any, without the express approval of Qwest.
- 3.5 Unless specified otherwise in this Agreement, Qwest shall bill all amounts due from CLEC for each resold service in accordance with the terms and conditions as specified in the Qwest tariff.

4. Taxes

- 4.1 Any federal, state or local excise, sales, or use taxes (excluding any taxes levied on income) resulting from the performance of this Agreement shall be borne by the Party upon which the obligation for payment is imposed under applicable law, even if the obligation to collect and remit such taxes is placed upon the other Party. Any such taxes shall be shown as separate items on applicable billing documents between the Parties. The Party so obligated to pay any such taxes may contest the same in good faith, at its own expense, and shall be entitled to the benefit of any refund or recovery, provided that such Party shall not permit any lien to exist on any asset of the other Party by reason of the contest. The Party obligated to collect and remit taxes shall cooperate fully in any such contest by the other Party by providing records, testimony and such additional information or assistance as may reasonably be necessary to pursue the contest. To the extent a sale is claimed to be for resale tax exemption, the purchasing Party shall furnish the providing Party a proper resale tax

³ MCI Order, p. 29 and AT&T Order, p. 35.

exemption certificate as authorized or required by statute or regulation by the jurisdiction providing said resale tax exemption. Failure to timely provide said resale tax exemption certificate will result in no exemption being available to the purchasing Party during the applicable reporting period.

5. Intellectual Property

- 5.1 **Obligations of Party Requesting Access.** As a condition to the access or use of patents, copyright, trade secrets, and other intellectual property (including software) owned or controlled by a third party to the extent necessary to implement this Agreement or specifically required by the then applicable federal and state rules and regulations relating to Interconnection and access to telecommunications facilities and services ("Third Party Intellectual Property"), the Party providing access may require the other, upon written notice from time to time, to obtain a license or permission for such access or use of Third Party Intellectual Property, make all payment, if any, in connection with obtaining such license, and provide evidence of such license.
- 5.2 **Obligations of Party Providing Access.** The Party providing access shall provide a list of all known and necessary Third Party Intellectual Property applicable to the other Party, and take all necessary and appropriate steps to facilitate the negotiation of any mandatory licenses. The treatment of third party licenses shall be in accordance with FCC rules and regulations and/or judicial determinations.
- 5.3 **Any intellectual property jointly developed in the course of performing this Agreement shall belong to both Parties who shall have the right to grant non-exclusive licenses to third parties except as otherwise designated in writing by one Party to another. Any intellectual property which originates from or is developed by a Party shall remain in the exclusive ownership of that Party. Except for a limited license to use patents or copyrights to the extent necessary for the Parties to use any facilities or equipment (including software) or to receive any service solely as provided under this Agreement, no license in patent, copyright, trademark or trade secret, or other proprietary or intellectual property presently or hereafter owned, controlled or licensable by a Party, is granted to the other Party or shall be implied or arise by estoppel.**

6. Severability

- 6.1 In the event that any one or more of the provisions contained herein shall for any reason be held to be unenforceable or invalid in any respect under law or regulation, the Parties will negotiate in good faith for replacement language. If any part of this Agreement is held to be invalid or unenforceable for any reason, such invalidity or unenforceability will affect only the portion of this Agreement which is invalid or unenforceable. In all other respects this Agreement will stand as if such invalid or unenforceable provision had not been a part hereof, and the remainder of this Agreement shall remain in full force and effect.

7. Responsibility for Environmental Contamination

- 7.1 CLEC shall in no event be liable to Qwest for any costs whatsoever resulting from the presence or release of any environmental hazard CLEC did not introduce to the affected work location. Qwest shall, at CLEC's request, indemnify, defend, and hold harmless CLEC, and each of its officers, directors and employees from and against any losses, damages, claims, demands, suits, liabilities, fines, penalties and expenses (including reasonable attorneys' fees) arising out of or resulting from (a) any environmental hazard Qwest, its contractors or agents introduce to the work location, or (b) the presence or release of any environmental hazard for which Qwest is responsible under applicable law.
- 7.2 Qwest shall in no event be liable to CLEC for any costs whatsoever resulting from the presence or release of any environmental hazard Qwest did not introduce to the affected work location. CLEC shall, at Qwest's request, indemnify, defend, and hold harmless Qwest, and each of its officers, directors and employees from and against any losses, damages, claims, demands, suits, liabilities, fines, penalties and expenses (including reasonable attorneys' fees) arising out of or resulting from (a) any environmental hazard CLEC, its contractors or agents introduce to the work location, or (b) the presence or release of any environmental hazard for which CLEC is responsible under applicable law.
- 7.3 In the event any suspect materials within Qwest-owned, operated or leased facilities are identified to be asbestos-containing, CLEC will ensure that, to the extent any activities which it undertakes in the facility disturb such suspect materials, such CLEC activities will be in accordance with applicable local, state and federal environmental and health and safety statutes and regulations. Except for abatement activities undertaken by CLEC or equipment placement activities that result in the generation of asbestos containing material, CLEC shall not have any responsibility for managing, nor be the owner of, nor have any liability for, or in connection with, any asbestos containing material. Qwest agrees to immediately notify CLEC if Qwest undertakes any asbestos control or asbestos abatement activities that potentially could affect CLEC equipment or operations, including, but not limited to, contamination of equipment.
- 7.4 Each Party will be solely responsible, at its own expense, for proper handling, storing, transport and disposal of all (a) substances or materials that it or its contractors or agents bring to, create or assume control over at work locations, or (b) waste resulting therefrom or otherwise generated in connection with its or its contractors' or agents' activities at the work locations.

8. Branding

8.1⁴ Except as provided in this Agreement, at CLEC's request, Qwest shall be obligated to provide branding and unbranding of services provided to CLEC Customers pursuant to this Agreement in a nondiscriminatory manner consistent with the branding of such services to Qwest Customers.

8.2⁵ If CLEC requests that a service provided under this Agreement be branded as a CLEC service and Qwest informs CLEC that such branding is not available or if it is not practical to so brand the service, then Qwest will offer CLEC the service on an unbranded basis at CLEC's request.

8.3⁶ Without limitation of the provisions of Section 8.1 and 8.2, if Qwest is offering a service on an unbranded basis, Qwest may brand such service with the Qwest brand only if Qwest also offers to brand the service with the CLEC brand.

8.4 [Intentionally left blank for numbering consistency]

8.5⁷ Qwest will not be required to rebrand uniforms and vehicles. The uniforms of Qwest's repair and maintenance personnel shall bear the same or less Qwest branding than was present as of February 8, 1996.

8.6 Computerized Programming

8.6.1 Repair bills or receipts handed to the end user at the time service is rendered may bear the Qwest brand. If the computerized programming which either informs the repair employees of the address and service needed, or prints the receipts, can be modified, at a reasonable cost, to use the brand of a selection of CLEC, then Qwest shall provide that customized programming. Otherwise, the receipt may bear the brand of Qwest's repair and maintenance, and will add that it provides authorized repair and maintenance for, and list the CLECs for which Qwest is contracted to provide service. If Qwest's computerized programming can be modified to inform Qwest's employee for which CLEC service is being rendered, the repair employee may be required to circle or otherwise indicate the name of the appropriate CLEC on the receipt or other form.

⁴ Arizona Bench Order, May 29, 1997 Hearing, pp. 1582-3; Procedural Order, July 14, 1997 at page 2-3.

⁵ Id.

⁶ Id.

⁷ Bolded language in Sections 8.5 and 8.6 included per MCIm Order, pp. 13-14 at Issue 23 and AT&T Order at Issue 30.

- 8.6.2 If Qwest chooses to use its logo on the above forms, it may only do so if it also uses the logos of the CLECs. If Qwest's Customers are served by its own repair and maintenance, Qwest's name should be listed with the other CLECs.
- 8.6.3 Typeface, font, and appearances of the names, size and appearance of the logos of the CLECs and Qwest in all locations must be the same.
- 8.6.4 Qwest will not be held liable for any unintentional errors that occur in the branding process.
- 8.6.5 The foregoing steps to rebrand repair and maintenance service need only be taken by Qwest where technically feasible.
- 8.7 Qwest shall provide, for CLEC's review, the methods and procedures, training and approaches to be used by Qwest to assure that Qwest meets CLEC's branding requirements.
- 8.8 This Section 8 shall confer on Qwest no rights to the service marks, trademarks and trade names owned by or used in connection with services by CLEC or its Affiliates, except as expressly permitted by CLEC.
- 8.9 At the request of CLEC and where technically feasible, Qwest will rebrand operator services and directory assistance in CLEC's name.⁸
- 8.10 The expense of rebranding operator services and directory assistance, if required by CLEC, shall be included as a forward looking economic cost, such cost to be resolved in the future arbitration to be conducted by the Commission as it considers cost studies.⁹

9. Independent Contractor Status

- 9.1 Nothing contained herein shall constitute the Parties as joint venturers, partners, employees or agents of one another, and neither Party shall have the right or power to bind or obligate the other.
- 9.2 Each Party is an independent contractor, and has and hereby retains the right to exercise full control of and supervision over its own performance or its obligations under this Agreement and retains full control over the employment, direction, compensation and discharge of all employees assisting in the performance of such obligations. Each Party will be solely responsible for all matters relating to payment of such employees, including compliance with social security taxes, withholding taxes, and other payroll taxes with respect to their respective employees, as well as any taxes, contributions or other obligations

⁸ AT&T Order, p. 31 at Issue 62.

⁹ AT&T Order, p. 18 at Issue 30.

imposed by applicable state unemployment or workers' compensation acts and all other regulations governing such matters. Each Party has sole authority and responsibility to hire, fire and otherwise control its employees.

- 9.3 Subject to the limitations on liability and except as otherwise provided in this Agreement, each Party shall be responsible for (a) its own acts and performance of all obligations imposed by applicable law in connection with its activities, legal status and property, real or personal, and (b) the acts of its own Affiliates, employees, agents and contractors during the performance of that Party's obligations hereunder. Except for provisions herein expressly authorizing one Party to act for the other, nothing in this Agreement shall constitute a Party as a legal representative or agent of the other Party, nor shall a Party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name or on behalf of the other Party unless otherwise expressly permitted by such other Party. Except as otherwise expressly provided in this Agreement, neither Party shall undertake to perform any obligation of the other Party, whether regulatory or contractual, or to assume any responsibility for the management of the other Party's business.

10. Referenced Documents

- 10.1 All references to Sections, Exhibits, and Schedules shall be deemed to be references to Sections of, and Exhibits and Schedules to, this Agreement unless the context shall otherwise require. Whenever any provision of this Agreement refers to a technical reference, technical publication, CLEC practice, Qwest practice, any publication of telecommunications industry administrative or technical standards, or any other document specifically incorporated into this Agreement, it will be deemed to be a reference to the most recent version or edition (including any amendments, supplements, addenda, or successors) or such document that is in effect, and will include the most recent version or edition (including any amendments, supplements, addenda, or successors) of each document incorporated by reference in such a technical reference, technical publication, CLEC practice, Qwest practice, or publication of industry standards, unless CLEC elects otherwise.

11. Publicity and Advertising

- 11.1 Neither Party shall publish or use any advertising, sales promotions or other publicity materials that use the other Party's logo, trademarks or service marks without the prior written approval of the other Party.

12. Executed in Counterparts

- 12.1 This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but such counterparts shall together constitute one and the same instrument.

13. Headings Not Controlling

- 13.1 The headings and numbering of Sections, Parts, Appendices and Attachments in this Agreement are for convenience only and shall not be construed to define or limit any of the terms herein or affect the meaning or interpretation of this Agreement.

14. Joint Work Product

- 14.1 This Agreement is the joint work product of the Parties and has been negotiated by the Parties and their respective counsel and shall be fairly interpreted in accordance with its terms and, in the event of any ambiguities, no inferences shall be drawn against either Party.

15. Survival

- 15.1 Any liabilities or obligations of a Party for acts or omissions prior to the cancellation or termination of this Agreement; any obligation of a Party under the provisions regarding indemnification, confidential information, limitation of liability, and any other provisions of this Agreement which, by their terms, are contemplated to survive, or to be performed after, termination of this Agreement, shall survive cancellation or termination thereof.

16. Effective Date

- 16.1 This Agreement shall become effective pursuant to Sections 251 and 252 of the Act, on _____.

17. Amendment of Agreement

- 17.1 Except as otherwise provided in this Agreement, no amendment or waiver of any provision of this Agreement, and no consent to any default under this Agreement, shall be effective unless the same is in writing and signed by an officer of the Party against whom such amendment, waiver or consent is claimed. If either Party desires an amendment to this Agreement during the term of this Agreement, it shall provide written notice thereof to the other Party describing the nature of the requested amendment. If the Parties are unable to agree on the terms of the amendment within thirty (30) days after the initial request therefor, the Party requesting the amendment may invoke the dispute resolution process under Section 27 of this Part A of this Agreement to determine the terms of any amendment to this Agreement.

18. Indemnification

- 18.1 Notwithstanding any limitations in remedies contained in this Agreement, each Party (the "Indemnifying Party") will indemnify and hold harmless the other Party ("Indemnified Party") from and against any loss, cost, claim, liability, damage and expense, including reasonable attorney's fees, to third parties, relating to or arising out of the libel, slander, invasion of privacy, misappropriation of a name or likeness, actual or alleged infringement or other violation or breach of any patent, copyright, trademark, service mark, trade name, trade

dress, trade secret or any other intellectual property presently existing or later created, negligence or willful misconduct by the Indemnifying Party, its employees, agents, or contractors in the performance of this Agreement or the failure of the Indemnifying Party to perform its obligations under this Agreement. In addition, the Indemnifying Party will, to the extent of its obligations to indemnify hereunder, defend any action or suit brought by a third party against the Indemnified Party. **If, after the Party providing access under this Agreement gives written notice to the other Party pursuant to Section 5.1, the other Party fails to obtain a license or permission for access or use of Third Party Intellectual Property, the Party providing access shall have no indemnification obligation hereunder for any loss, cost, claim, liability, damage and expense, including reasonable attorney's fees, to third parties, relating to or arising out of the failure of the other Party to obtain such license or permission.**¹⁰

- 18.2 The Indemnified Party will notify the Indemnifying Party promptly in writing of any written claim, lawsuit, or demand by third parties for which the Indemnified Party alleges that the Indemnifying Party is responsible under this Section 18 and tender the defense of such claim, lawsuit or demand to the Indemnifying Party. Failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of any liability that the Indemnifying Party might have, except to the extent that such failure prejudices the Indemnifying Party's ability to defend such claim.
- 18.3 The Indemnified Party also will cooperate in every reasonable manner with the defense or settlement of such claim, demand, or lawsuit. The Indemnifying Party shall keep the Indemnified Party reasonably and timely apprised of the status of the claim, demand or lawsuit. The Indemnified Party shall have the right to retain its own counsel, including in-house counsel, at its expense, and participate in but not direct the defense; provided, however, that if there are reasonable defenses in addition to those asserted by the Indemnifying Party, the Indemnified Party and its counsel may raise and direct such defenses, which shall be at the expense of the Indemnifying Party.
- 18.4 The Indemnifying Party will not be liable under this Section 18 for settlements or compromises by the Indemnified Party of any claim, demand or lawsuit unless the Indemnifying Party has approved the settlement or compromise in advance or unless the defense of the claim, demand or lawsuit has been tendered to the Indemnifying Party in writing and the Indemnifying Party has failed to timely undertake the defense. In no event shall the Indemnifying Party settle or consent to any judgment pertaining to any such action without the prior written consent of the Indemnified Party.

19. Limitation of Liability

- 19.1 Except as otherwise provided in the indemnity section, no Party shall be liable to the other Party for any Loss, defect or equipment failure caused by the conduct of the other Party, the other Party's agents, servants, contractors or others acting in aid or concert with the other Party.

¹⁰ Procedural Order, July 14, 1997, pages 4-5.

19.2 [Intentionally left blank for numbering consistency]

19.3 In no event shall either Party have any liability whatsoever to the other Party for any indirect, special, consequential, incidental or punitive damages, including, but not limited to, loss of anticipated profits or revenue or other economic loss in connection with or arising from anything said, omitted or done hereunder (collectively, "Consequential Damages"), even if the other Party has been advised of the possibility of such damages; provided, that the foregoing shall not limit a Party's obligation to indemnify, defend and hold the other Party harmless against any amounts payable to a third party, including any losses, costs, fines penalties, criminal or civil judgments or settlements, expenses (including attorneys' fees) and Consequential Damages of such third party. Nothing contained in this section shall limit either Party's liability to the other for (i) willful or intentional misconduct (including gross negligence); (ii) bodily injury, death or damage to tangible real or tangible personal property proximately caused by such party's negligent act or omission or that of their respective agents, subcontractors or employees, or (iii) **under the circumstances presented to the arbitrator, the Commission or other decision maker, as the case may be pursuant to the dispute resolution process in Section 27, a pattern of conduct is found to exist by such arbitrator, the Commission or other decision maker in violation of a party's obligations under this Agreement that justifies an award of Consequential Damages,**¹¹ nor shall anything contained in this section limit the Parties indemnification obligations, as specified above.

19.4 **Notwithstanding the provisions of Section 19.3, to the extent that Qwest tariffs contain limitations on liability, CLEC shall submit language for inclusion in its Intrastate retail tariffs, that is substantially similar to the limitation of liability language contained in Qwest's tariffs, and such limitations of liability shall govern for Customer claims. In addition, notwithstanding the provisions of Section 19.3, to the extent that the Commission's quality of service rules provide for remedies to CLEC or its Customers for Customer claims, then those remedies shall govern as to such claims.**¹²

20. Term of Agreement

20.1 This Agreement shall become effective upon Commission approval, and shall terminate on July 30, 2000, and thereafter shall continue in force and effect unless and until a new agreement, addressing all of the terms of this Agreement, becomes effective between the Parties. The Parties shall commence negotiations on a new agreement no later than one (1) year prior to the expiration of the term of this Agreement. Either Party may request resolution of open issues in accordance with the provisions of Section 27 of this Part A of this Agreement, Dispute Resolution, beginning nine (9) months prior to the expiration of this Agreement. Any disputes regarding the terms and conditions of the new interconnection agreement shall be resolved in accordance with said Section 27 of this Agreement and the

¹¹ Procedural Order, July 14, 1997, page 5-6.

¹² Arizona Bench Order, May 29, 1997 Hearing, p. 1610.

resulting agreement shall be submitted to the Commission. This Agreement shall remain in effect until a new interconnection agreement approved by the Commission has become effective.

21. Governing Law

- 21.1 This Agreement shall be governed by and construed in accordance with the Act and the FCC's rules and regulations, except insofar as state law may control any aspect of this Agreement, in which case the domestic laws of the State of Arizona, without regard to its conflicts of laws principles, shall govern.

22. Cancellation Charges

- 22.1 Except as provided pursuant to a Bona Fide Request, or as otherwise provided in any applicable tariff or contract referenced herein, no cancellation charges shall apply.

23. Regulatory Approvals

- 23.1 This Agreement, and any amendment or modification hereof, will be submitted to the Commission for approval in accordance with Section 252 of the Act. In the event any governmental authority or agency rejects any provision hereof, the Parties shall negotiate promptly and in good faith such revisions as may reasonably be required to achieve approval.
- 23.2 Qwest shall provide CLEC a summary describing the proposed change(s) to each Telecommunications Service which is available pursuant to this Agreement. Qwest shall also provide CLEC a summary describing the proposed change(s) of each intrastate and interstate tariff which provides for an Interconnection, unbundled Network Element or Ancillary Service that is available pursuant to this Agreement. Such summaries shall be available through an internet Web page to be posted on the same day the proposed change is filed with the Commission or the FCC or at least thirty (30) days in advance of its effective date, whichever is earlier.
- 23.3 In the event any governmental authority or agency orders Qwest to provide any service covered by this Agreement in accordance with any terms or conditions that individually differ from one or more corresponding terms or conditions of this Agreement, CLEC may elect to amend this Agreement to reflect any such differing terms or conditions contained in such decision or order, with effect from the date CLEC makes such election. The other services covered by this Agreement and not covered by such decision or order shall remain unaffected and shall remain in full force and effect.
- 23.4 The Parties intend that any additional services requested by either Party relating to the subject matter of this Agreement will be incorporated into this Agreement by amendment.

24. Compliance

- 24.1 Each Party shall comply with all applicable federal, state, and local laws, rules and regulations applicable to its performance under this Agreement.
- 24.2 Each Party represents and warrants that any equipment, facilities or services provided to the other Party under this Agreement comply with the Communications Law Enforcement Act of 1994 ("CALEA"). Each Party (the "Indemnifying Party") shall indemnify and hold the other Party (the "Indemnified Party") harmless from any and all penalties imposed upon the Indemnified Party for such noncompliance and shall, at the Indemnifying Party's sole cost and expense, modify or replace any equipment, facilities or services provided to the Indemnified Party under this Agreement to ensure that such equipment, facilities and services fully comply with CALEA.
- 24.3 All terms, conditions and operations under this Agreement shall be performed in accordance with all applicable laws, regulations and judicial or regulatory decisions of all duly constituted governmental authorities with appropriate jurisdiction, and this Agreement shall be implemented consistent with the FCC Interconnection Order and any applicable Commission orders. Each Party shall be responsible for obtaining and keeping in effect all FCC, Commission, franchise authority and other regulatory approvals that may be required in connection with the performance of its obligations under this Agreement. In the event the Act or FCC or Commission rules and regulations applicable to this Agreement are held invalid, this Agreement shall survive, and the Parties shall promptly renegotiate any provisions of this Agreement which, in the absence of such invalidated Act, rule or regulation, are insufficiently clear to be effectuated, violate, or are either required or not required by the new rule or regulation. During these negotiations, each Party will continue to provide the same services and elements to each other as are provided for under this Agreement. Provided, however, that either Party shall give ten (10) Business Days notice if it intends to cease any development of any new element or service that is not at that time being provided pursuant to this Agreement. In the event the Parties cannot agree on an amendment within thirty (30) days from the date any such rules, regulations or orders become effective, then the Parties shall resolve their dispute, including liability for non-compliance with the new clause or the cost, if any, of performing activities no longer required by the rule or regulation during the renegotiation of the new clause under the applicable procedures set forth in Section 27 herein.

25. Force Majeure

- 25.1 Neither Party shall be liable for any delay or failure in performance of any part of this Agreement from any cause beyond its control and without its fault or negligence including, without limitation, acts of nature, acts of civil or military authority, embargoes, epidemics, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, work stoppages, equipment failure, power blackouts, volcanic action, other major environmental disturbances, unusually severe weather conditions, inability to secure products or services of other persons or transportation facilities or acts or omissions of transportation carriers. No delay or other failure to perform shall be excused pursuant to this Section 25 unless such delay or failure and the consequences thereof are beyond the control and without the fault or negligence of the Party claiming excusable delay or other

failure to perform. In the event of any such excused delay in the performance of a Party's obligation(s) under this Agreement, the due date for the performance of the original obligation(s) shall be extended by a term equal to the time lost by reason of the delay. In the event of such delay, the delaying Party shall perform its obligations at a performance level no less than that which it uses for its own operations. In the event of a labor dispute or strike, the Parties agree to provide service to each other at a level equivalent to the level they provide themselves. In the event of a labor dispute or strike or work stoppage that continues for a period in excess of forty-eight (48) hours, CLEC may obtain replacement services for those services affected by such labor dispute or strike or work stoppage, in which event any liability of CLEC for the affected services shall be suspended for the period of the work stoppage or labor dispute or strike. In the event of such performance delay or failure by Qwest, Qwest agrees to resume performance in a nondiscriminatory manner and not favor its own provision of Telecommunications Services above that of CLEC.

26. Escalation Procedures

- 26.1 CLEC and Qwest agree to exchange escalation lists which reflect contact personnel including vice president-level officers. These lists shall include name, department, title, phone number, and fax number for each person. CLEC and Qwest agree to exchange up-to-date lists as reasonably necessary.

27. Dispute Resolution

- 27.1¹³ If any claim, controversy or dispute between the Parties, their agents, employees, officers, directors or affiliated agents ("Dispute") cannot be settled through negotiation, it may be resolved by arbitration conducted by a single arbitrator engaged in the practice of law, under the then current rules of the American Arbitration Association ("AAA"). The Federal Arbitration Act, 9 U.S.C. Secs. 1-16, not state law, shall govern the arbitrability of all Disputes. The arbitrator shall not have authority to award punitive damages. All expedited procedures prescribed by the AAA rules shall apply. The arbitrator's award shall be final and binding and may be entered in any court having jurisdiction thereof and shall be noticed to the Commission. The arbitrator shall determine which Party or Parties will bear the costs of arbitration, including apportionment, if appropriate. The arbitration shall occur in Denver, Colorado, and the governing law shall be in accordance with Section 21.1 above.

- 27.2¹⁴ In the event CLEC and Qwest are unable to agree on certain issues during the term of this Agreement, the Parties may identify such issues for arbitration before the Commission. Only those points identified by the Parties for arbitration will be submitted.

¹³ AT&T Order, p. 33 at Issue 76.

¹⁴ AT&T Order, p. 33 at Issue 76.

- 27.3 If a Dispute is submitted to arbitration pursuant to Section 27.1 above, the procedures described in this Section 27.3 shall apply, notwithstanding the then current rules of the AAA. Discovery shall be controlled by the arbitrator and shall be permitted to the extent set forth below. Each party may submit in writing to a Party, and that Party shall so respond, to an agreed amount of the following: interrogatories, demands to produce documents, and requests for admission. Not less than ten (10) days prior to the arbitration hearing, the Parties shall exchange witness and exhibit lists. Deposition discovery shall be controlled by the arbitrator. Additional discovery may be permitted upon mutual agreement of the Parties or the determination of the arbitrator. The arbitration hearing shall be commenced within thirty (30) days after a demand for arbitration by either Party and shall be held in Phoenix, Arizona. The arbitrator shall control the scheduling so as to process the matter expeditiously. The Parties may submit written briefs. The arbitrator shall rule on the dispute by issuing a written opinion within seven (7) days after the close of the hearings. The times specified in this section may be extended upon mutual agreement of the Parties or by the arbitrator upon a showing of good cause. The decision of the arbitrator shall be final and binding upon the Parties and judgment upon the award rendered by the arbitrator may be entered in a court having jurisdiction. The decision shall also be submitted to the Commission.

28. Nondisclosure

- 28.1 All information, including, but not limited to, specifications, microfilm, photocopies, magnetic disks, magnetic tapes, drawings, sketches, models, samples, tools, technical information, data, employee records, maps, financial reports, and market data (a) furnished by one Party to the other Party dealing with Customer specific, facility specific, or usage specific information, other than Customer information communicated for the purpose of publication of directory database inclusion, or (b) in written, graphic, electromagnetic, or other tangible form and marked at the time of delivery as "Confidential" or "Proprietary", or (c) declared orally or in writing to the Recipient at the time of delivery, or by written notice given to the Recipient within ten (10) days after delivery, to be "Confidential" or "Proprietary" (collectively referred to as "Proprietary Information"), shall remain the property of the Discloser. A Party who receives Proprietary Information via an oral communication may request written confirmation that the material is Proprietary Information. A Party who delivers Proprietary Information via an oral communication may request written confirmation that the Party receiving the information understands that the material is Proprietary Information.
- 28.2 Upon request by the Discloser, the Recipient shall return all tangible copies of Proprietary Information, whether written, graphic or otherwise, except that the Recipient's legal counsel may retain one (1) copy for archival purposes.
- 28.3 Each Party shall keep all of the other Party's Proprietary Information confidential and shall use the other Party's Proprietary Information only in connection with this Agreement. Neither Party shall use the other Party's Proprietary Information for any other purpose except upon such terms and conditions as may be agreed upon between the Parties in writing.
- 28.4 Unless otherwise agreed, the obligations of confidentiality and non-use set forth in this Agreement do not apply to such Proprietary Information that:

- 28.4.1 was, at the time of receipt, already known to the Recipient free of any obligation to keep it confidential evidenced by written records prepared prior to delivery by the Discloser; or
 - 28.4.2 is or becomes publicly known through no wrongful act of the Recipient; or
 - 28.4.3 is rightfully received from a third person having no direct or indirect secrecy or confidentiality obligation to the Discloser with respect to such information; or
 - 28.4.4 is independently developed by an employee, agent, or contractor of the Recipient which individual is not involved in any manner with the provision of services pursuant to this Agreement and does not have any direct or indirect access to the Proprietary Information; or
 - 28.4.5 is approved for release by written authorization of the Discloser; or
 - 28.4.6 is required by law, a court, or governmental agency, provided that the Discloser has been notified of the requirement promptly after the Recipient becomes aware of the requirement, subject to the right of the Discloser to seek a protective order as provided in Section 28.5 below.
- 28.5 For a period of ten (10) years from receipt of Proprietary Information, the Recipient shall (a) use it only for the purpose of performing under this Agreement, (b) hold it in confidence and disclose it only to employees, authorized contractors and authorized agents who have a need to know it in order to perform under this Agreement, and (c) safeguard it from unauthorized use or disclosure using no less than the degree of care with which the Recipient safeguards its own Proprietary Information. Any authorized contractor or agent to whom Proprietary Information is provided must have executed a written agreement comparable in scope to the terms of this Section. Notwithstanding the foregoing, each Party shall provide advance notice of three (3) Business Days to the other of the intent to provide Proprietary information to a governmental authority and the Parties shall cooperate with each other in attempting to obtain a suitable protective order. The Recipient agrees to comply with any protective order that covers the Proprietary Information to be disclosed.
- 28.6 Each Party agrees that the Discloser would be irreparably injured by a breach of this Section 28 by the Recipient or its representatives and that the Discloser shall be entitled to seek equitable relief, including injunctive relief and specific performance, in the event of any breach of this Section 28. Such remedies shall not be exclusive but shall be in addition to all other remedies available at law or in equity.
- 28.7 CPNI related to either Party's subscribers obtained by virtue of Local Interconnection or any other service provided under this Agreement shall be the Discloser's Proprietary Information and may not be used by the Recipient for any purpose except performance of its obligations under this Agreement, and in connection with such performance, shall be disclosed only to employees, authorized contractors and authorized agents with a need to know, unless the subscriber expressly directs the Discloser to disclose such information to the Recipient pursuant to the requirements of Section 222(c)(2) of the Act. If the Recipient seeks and

obtains written approval to use or disclose such CPNI from the Discloser, such approval shall be obtained only in compliance with Section 222(c)(2) and, in the event such authorization is obtained, the Recipient may use or disclose only such information as the Discloser provides pursuant to such authorization and may not use information that the Recipient has otherwise obtained, directly or indirectly, in connection with its performance under this Agreement.

- 28.8 Except as otherwise expressly provided in this Section 28, nothing herein shall be construed as limiting the rights of either Party with respect to its subscriber information under any applicable law, including, without limitation, Section 222 of the Act.
- 28.9 Effective Date Of This Section. Notwithstanding any other provision of this Agreement, the Proprietary Information provisions of this Agreement shall apply to all Proprietary Information furnished by either Party with a claim of confidentiality or proprietary nature at any time.

29. Notices

- 29.1 Except as otherwise provided herein, all notices or other communication hereunder shall be deemed to have been duly given when made in writing and delivered in person or deposited in the United States mail, certified mail, postage prepaid, return receipt requested, or delivered by prepaid overnight express mail, and addressed as follows:

CLEC:

Charles R. Eazor
VP/GM Voice Solutions
Internet Commerce and communications
7100 East Belleview, Suite 201
Greenwood Village, CO 80111
303-414-7251

QWEST:

Qwest Corporation
Director Interconnection
1801 California Street, Suite 2410
Denver, CO 80202

With copy to:

Qwest Corporation
Corporate Counsel, Interconnection
1801 California Street, Suite 3800
Denver, CO 80202

- 29.2 If personal delivery is selected to give notice, a receipt of such delivery shall be obtained. The address to which notices or communications may be given to either Party may be changed by written notice given by such Party to the other pursuant to this Section 29.

30. Assignment

- 30.1 Neither Party may assign, transfer (whether by operation of law or otherwise) or delegate this Agreement (or any rights or obligations hereunder) to a third party without the prior written consent of the other Party, which consent shall not be unreasonably withheld, provided that each Party may assign this Agreement to an Affiliate or an entity under its common control or an entity acquiring all or substantially all of its assets or equity by providing prior written notice to the other Party of such assignment or transfer. Any attempted assignment or transfer that is not permitted under the provisions of this Section 30 is void ab initio. Without limiting the generality of the foregoing, this Agreement shall be binding upon and shall inure to the benefit of the Parties' respective successors and assigns. No assignment or delegation hereof shall relieve the assignor of its obligations under this Agreement.
- 30.2 If any obligation of Qwest under this Agreement is performed by a subcontractor or Affiliate, Qwest shall remain fully responsible for the performance of this Agreement in accordance with its terms, and Qwest shall be solely responsible for payments due to its subcontractors.
- 30.3 If any obligation of CLEC under this Agreement is performed by a subcontractor or Affiliate, CLEC shall remain fully responsible for the performance of this Agreement in accordance with its terms, and CLEC shall be solely responsible for payments due to its subcontractors.

31. Warranties

- 31.1 Qwest shall conduct all activities and interfaces which are provided for under this Agreement with CLEC Customers in a carrier-neutral, nondiscriminatory manner.
- 31.2 Qwest warrants that it has provided, and during the term of this Agreement it will continue to provide, to CLEC true and complete copies of all material agreements in effect between Qwest and any third party (including Affiliates) providing any services to CLEC on behalf of or under contract to Qwest in connection with Qwest's performance of this Agreement, or from whom Qwest has obtained licenses or other rights used by Qwest to perform its obligations under this Agreement, provided, however, that Qwest may provide such agreements under appropriate protective order.

32. Default

- 32.1 In the event of a breach of any material provision of this Agreement by either Party, the non-breaching Party shall give the breaching Party and the Commission written notice thereof, and:
- 32.1.1 if such material breach is for non-payment of amounts due hereunder pursuant to this Agreement, the breaching Party shall cure such breach within thirty (30) calendar days of receiving such notice. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach. Amounts disputed in good faith and withheld or set off shall not be deemed "amounts due hereunder" for the purpose of this provision.

- 32.1.2 if such material breach is for any failure to perform in accordance with this Agreement, which, in the sole judgment of the non-breaching Party, adversely affects the non-breaching Party's subscribers, the non-breaching Party shall give notice of the breach and the breaching Party shall cure such breach to the non-breaching Party's reasonable satisfaction within ten (10) calendar days or within a period of time equivalent to the applicable interval required by this Agreement, whichever is shorter. If the breaching Party does not cure such breach within the applicable time period, the non-breaching Party may, at its sole option, terminate this Agreement, or any parts hereof. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach. Notice under this Subsection 32.1.2 may be given electronically or by facsimile, provided that a hard copy or original of such notice is sent by overnight delivery service.
- 32.1.3 if such material breach is for any other failure to perform in accordance with this Agreement, the breaching Party shall cure such breach to the non-breaching Party's reasonable satisfaction within forty-five (45) calendar days, and, if it does not, the non-breaching Party may, at its sole option, terminate this Agreement, or any parts hereof. The non-breaching Party shall be entitled to pursue all available legal and equitable remedies for such breach.
- 32.2 CLEC may terminate this Agreement in whole at any time only for cause upon sixty (60) calendar days' prior written notice. CLEC's sole liability shall be payment of amounts due for services provided or obligations assumed up to the date of termination.
- 32.3 In the event of any termination under this Section 32, Qwest and CLEC agree to cooperate to provide for an uninterrupted transition of services to CLEC or another vendor designated by CLEC to the extent that Qwest has the ability to provide such cooperation.
- 32.4 Notwithstanding any termination hereof, the Parties shall continue to comply with their obligations under the Act.

33. Remedies

- 33.1 In the event Qwest fails to switch a subscriber to CLEC service as provided in this Agreement, Qwest shall reimburse CLEC in an amount equal to all fees paid by such subscriber to Qwest for such failed-to-be-transferred services from the time of such failure to switch to the time at which the subscriber switch is accomplished. This remedy shall be in addition to all other remedies available to CLEC under this Agreement or otherwise available.
- 33.2 All rights of termination, cancellation or other remedies prescribed in this Agreement, or otherwise available, are cumulative and are not intended to be exclusive of other remedies to which the injured Party may be entitled at law or equity in case of any breach or threatened breach by the other Party of any provision of this Agreement. Use of one or more remedies shall not bar use of any other remedy for the purpose of enforcing the provisions of this Agreement.

34. Waivers

- 34.1 No waiver of any provisions of this Agreement and no consent to any default under this Agreement shall be effective unless the same shall be in writing and properly executed by or on behalf of the Party against whom such waiver or consent is claimed.
- 34.2 No course of dealing or failure of either Party to strictly enforce any term, right, or condition of this Agreement in any instance shall be construed as a general waiver or relinquishment of such term, right or condition.
- 34.3 Waiver by either Party of any default or breach by the other Party shall not be deemed a waiver of any other default or breach.
- 34.4 By entering into this Agreement, neither Party waives any right granted to it pursuant to the Act.

35. No Third Party Beneficiaries

- 35.1 The provisions of this Agreement are for the benefit of the Parties hereto and not for any other person; provided, however, that this shall not be construed to prevent CLEC from providing its Telecommunications Services to other carriers. This Agreement shall not provide any person not a party hereto with any remedy, claim, liability, reimbursement, claim of action, or other right in excess of those existing without reference hereto.

36. Physical Security

- 36.1 Qwest shall exercise the same degree of care to prevent harm or damage to CLEC or its employees, agents or subscribers, or its property as Qwest provides itself. CLEC shall exercise the same degree of care to ensure the security of its equipment physically collocated within Qwest's space as CLEC provides such security to itself.
 - 36.1.1 Qwest will restrict access to approved personnel to Qwest's buildings. CLEC is responsible for the action of its employees and other authorized non-CLEC personnel; Qwest is responsible for the action of its employees and other authorized non-Qwest personnel.
 - 36.1.2 Qwest will furnish to CLEC the current name(s) and telephone number(s) of those central office supervisor(s) where a physical collocation arrangement exists. The central office supervisor(s) will be the only Qwest employee(s) with access to CLEC collocation space.
 - 36.1.3 Qwest will comply at all times with Qwest security and safety procedures at the individual central office locations where CLEC has physical collocation arrangements. The Parties will cooperate to analyze security procedures of each company to evaluate ways in which security procedures of Qwest may be enhanced.

- 36.1.4 Qwest will allow CLEC to inspect or observe its physical spaces which house or contain CLEC equipment or equipment enclosures at any time upon completion of the physical collocation quotation. Upon completion of the build out of the physical space, Qwest will furnish CLEC with all keys, entry codes, lock combinations, or other materials or information which may be needed to gain entry via direct access to CLEC's physical space.
- 36.1.5 Qwest agrees to logically partition any Qwest owned access device systems, whether biometric or card reader, or types which are encoded identically or mechanical coded locks on external and or internal doors to spaces which house CLEC equipment.
- 36.1.6 Qwest agrees to limit the keys used in its keying systems for spaces which contain CLEC equipment to the Qwest supervisor for the specific facility to emergency access only. CLEC shall further have the right to change locks where deemed necessary for the protection and security of its physical spaces and will provide the Qwest supervisor with the current key.
- 36.1.8 Qwest shall control unauthorized access from passenger and freight elevators, elevator lobbies and spaces which contain or house CLEC equipment or equipment space in the same manner as Qwest provides such control for itself.
- 36.1.9 Qwest will provide notification to designated CLEC personnel to indicate an actual or attempted security breach of CLEC physical space in the same time frame as Qwest provides such notification to itself.

37. Network Security

- 37.1 Qwest shall provide an appropriate and sufficient back-up and recovery plan to be used in the event of a system failure or emergency.
- 37.2 Qwest shall install controls to (a) disconnect a user for a pre-determined period of inactivity on authorized ports; (b) protect subscriber proprietary information; and (c) ensure both ongoing operational and update integrity.
- 37.3 Each Party shall be responsible for the security arrangements on its side of the network to the Point of Interconnection. The Parties shall jointly cooperate to analyze network security procedures and cooperate to ensure the systems, access and devices are appropriately secured and compatible.

38. Revenue Protection

- 38.1 Qwest shall make available to CLEC all present and future fraud prevention or revenue protection features that Qwest provides to itself or others. These features include, but are not limited to, operator screening codes, information digits assigned such as information digits '29' and '70' which indicate prison and COCOT pay phone originating line types respectively, in accordance with the requirements established by the FCC, call blocking of

domestic, international blocking for business and residence, 900, NPA-976, and specific line numbers. Qwest shall additionally provide partitioned access to fraud prevention, detection and control functionality within pertinent Operations Support Systems ("OSS") which include, but are not limited to, Line Information Data Base Fraud monitoring systems.

- 38.2 Uncollectible or unbillable revenues resulting from, but not confined to, provisioning, maintenance, or signal network routing errors shall be the responsibility of the Party causing such error.
- 38.3 Uncollectible or unbillable revenues resulting from the accidental or malicious alteration of software underlying Network Elements or their subtending operational support systems by unauthorized third parties shall be the responsibility of the Party having administrative control of access to said Network Element or operational support system software.
- 38.4 Each Party shall be responsible for any uncollectible or unbillable revenues resulting from the unauthorized use of facilities under its control or services it provides, including clip-on fraud.
- 38.5 The Parties shall work cooperatively to minimize fraud associated with third-number billed calls, calling card calls, and any other services related to this Agreement.

39. Law Enforcement Interface

- 39.1 Qwest shall provide all necessary assistance to facilitate the execution of wiretap or dialed number recorder orders from law enforcement authorities.

40. Collocation

40.1 General Description

- 40.1.1 Collocation is the right of CLEC to obtain dedicated space in Qwest Local Serving Office (LSO) or other Qwest locations, including, but not limited to, Qwest serving wire center and tandem offices, as well as all buildings or similar structures owned or leased by Qwest, whether or not on public rights-of way, that house Qwest network facilities, including, but not limited to, vaults containing loop concentrators or similar structures, and the right to place equipment in such spaces for the purposes of interconnection with Qwest's network or access to Qwest's unbundled Network Elements. Collocation also includes Qwest providing resources necessary for the operation and economical use of collocated equipment.¹⁵
- 40.1.2 Collocation is offered for network interconnection between the Parties. CLEC may cross connect to other collocated parties via facilities provided by Qwest, provided that CLEC's collocated equipment is also used for interconnection with Qwest or access to Qwest's unbundled Network Elements.

¹⁵ MCIm Order, p. 19 at Issue 31 and AT&T Order Issue 10.

- 40.1.3 CLEC is responsible for bringing its own or leased facilities to the Qwest-designated Point of Interface ("POI"). Qwest will extend CLEC's facilities from the POI to the cable vault within the wire center. If necessary, Qwest may bring the facilities into compliance with Qwest internal fire code standards and extend the facilities to the collocated space.
- 40.1.4 CLEC will be provided two (2) points of entry into the Qwest wire center only when there are at least two (2) existing entry points for Qwest cable and when there are vacant entrance ducts in both.
- 40.1.5 **CLEC may collocate transmission equipment (including Digital Cross Connect Systems and Remote Switching Units (RSU)) to terminate basic transmission facilities. CLEC may not collocate equipment used to provide enhanced services.** CLEC must identify what equipment will be installed, to allow for Qwest to use this information in engineering the power, floor loading, heat release, environmental participant level, and HVAC. **CLEC shall not use RSUs to enable the bypassing of switched access charges. Qwest will be permitted to audit CLEC's reporting of local and toll calls. At CLEC's expense, CLEC will be required to block the ability of RSUs to bypass switched access charges, if it becomes feasible to do so.**¹⁶
- 40.1.6 **CLEC may collocate the amount and type of equipment it deems necessary in its collocated space in accordance with FCC rules and regulations.**¹⁷
- 40.1.7 Expanded Interconnection Channel Termination (EICT). Telecommunications interconnection between CLEC's collocated equipment and Qwest's network may be accomplished via an Expanded Interconnection Channel Termination (EICT). This element can be at the DS-3, DS-1, DS-0, or any other technically feasible level, subject to network disclosure requirements of the FCC, depending on the Qwest service to which it is connected. The terms and conditions of the tariff for EICT are incorporated only to the extent that they are agreed to by the Parties. Within ninety (90) days (or other acceptable time agreed to by the Parties) of the Effective Date of this Agreement, the Parties will meet to review the tariff and seek resolution on disagreed items.
- 40.1.8 Consistent with Qwest's internal practice, within ten (10) Business Days of CLEC's request for any space, Qwest shall provide information available to it regarding the environmental conditions of the space provided for placement of equipment and interconnection, including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in Qwest's possession or files, or

¹⁶ MCI Order, p. 20 at Issue 32 and AT&T Order Issue 9.

¹⁷ MCI Order, p. 20 at Issue 32 and AT&T Order Issue 9.

the possession of an agent, contractor, employee, lessor, or tenant of Qwest's that holds such information on Qwest's behalf.

- 40.1.9 Qwest shall allow CLEC to perform any environmental site investigations, including, but not limited to, asbestos surveys, which CLEC deems to be necessary in support of its collocation needs. CLEC shall advise Qwest in writing of its intent to conduct such investigation, and shall receive written approval from Qwest to proceed. CLEC shall indemnify Qwest according to Section 18 of Part A of this Agreement for any loss or claim for damage suffered by Qwest as a result of CLEC's actions during any site inspection.
- 40.1.10 If the space provided for the placement of equipment, Interconnection, or provision of service contains environmental contamination or hazardous material, particularly, but not limited to, asbestos, lead paint or radon, which makes the placement of such equipment or interconnection hazardous, Qwest shall offer an alternative space, if available, for CLEC's consideration.

40.2 Virtual Collocation

- 40.2.1 Qwest shall provide virtual collocation for the purpose of Interconnection or access to unbundled Network Elements subject to the rates, terms and conditions of this Agreement.
- 40.2.2 Upon mutual agreement, CLEC will have physical access to the Qwest wire center building pursuant to a virtual collocation arrangement.
- 40.2.3 CLEC will be responsible for obtaining and providing to Qwest administrative codes, e.g., common language codes, for all equipment specified by CLEC and installed in wire center buildings.
- 40.2.4 CLEC will be responsible for payment of training of Qwest employees for the maintenance, operation and installation of CLEC's virtually collocated equipment when that equipment is different than the equipment used by Qwest. Training conditions are further described in the Virtual Collocation Rate Element section following.
- 40.2.5 CLEC will be responsible for payment of reasonable charges incurred as a result of agreed upon maintenance and/or repair of CLEC's virtually collocated equipment.
- 40.2.6 Qwest does not guarantee the reliability of CLEC's virtually collocated equipment, but Qwest is responsible for proper installation, maintenance and repair of such equipment, including the change out of electronic cards provided by CLEC.
- 40.2.7 CLEC is responsible for ensuring the functionality and interoperability of virtually collocated SONET equipment provided by different manufacturers.
- 40.2.8 CLEC, as bailor, will transfer possession of CLEC's virtually collocated equipment to Qwest, as bailee, for the sole purpose of providing Qwest with the ability to install,

Part A

maintain and repair CLEC's virtually collocated equipment. Title to the CLEC virtually collocated equipment shall not pass to Qwest.

- 40.2.9 CLEC shall ensure that upon receipt by Qwest of CLEC's virtually collocated equipment, CLEC will make available all access to ongoing technical support to Qwest, as available under the equipment warranty or other terms and conditions, all at CLEC's expense. CLEC shall advise the manufacturer and seller of the virtually collocated equipment that it will be installed, maintained and repaired by Qwest.
- 40.2.10 CLEC's virtually collocated equipment must comply with the Bellcore Network Equipment Building System (NEBS) Generic Equipment Requirements TR-NWT-000063, electromagnetic compatibility (EMC) per GR-1089-CORE, Company wire center environmental and transmission standards and any statutory (local, state or federal) and/or regulatory requirements, all of the foregoing which may be in effect at the time of equipment installation or which may subsequently become effective. CLEC shall provide Qwest interface specifications (e.g., electrical, functional, physical and software) of CLEC's virtually collocated equipment.
- 40.2.11 CLEC must specify all software options and associated plug-ins for its virtually collocated equipment.
- 40.2.12 CLEC is responsible for purchasing and maintaining a supply of spares. Upon failure of the CLEC virtually collocated equipment, CLEC is responsible for transportation and delivery of maintenance spares to Qwest at the wire center housing the failed equipment.
- 40.2.13 Where CLEC is virtually collocated in a premises which was initially prepared for virtual collocation, CLEC may elect to retain its virtual collocation in that premises and expand that virtual collocation according to the rates, terms and conditions of this Agreement.

40.3 Physical Collocation

- 40.3.1 Qwest shall provide to CLEC physical collocation of equipment necessary for Interconnection or for access to unbundled Network Elements, except that Qwest shall provide for virtual collocation where space is available or expansion or rearrangement is possible if Qwest demonstrates to the Commission that physical collocation is not practical for technical reasons or because of space limitations, as provided in Section 251(c)(6) of the Act. CLEC shall pay a prorated amount for expansion of said space. Qwest shall provide such collocation for the purpose of Interconnection or access to unbundled Network Elements, except as otherwise mutually agreed to in writing by the Parties or as required by the FCC or the Commission, subject to the rates, terms and conditions of this Agreement.
- 40.3.1.1 Qwest shall permit CLEC to use vendors for all required engineering and installation services associated with its collocated equipment which are being collocated by CLEC pursuant to this Agreement. Within one hundred and twenty (120) days after the Effective Date of this Agreement, Qwest and**

CLEC shall compose and agree on a list of approved vendors and/or agree on minimum qualifications for such contractors consistent with industry standards, such agreement not to be unreasonably withheld. In the event such agreement cannot be reached and the dispute resolution process outlined in Section 27 above has not concluded on the issue of approved vendors, the list of approved vendors maintained by Qwest as of the Effective Date of this Agreement shall be the default list until the conclusion of the dispute resolution process.¹⁸

- 40.3.2 Where CLEC is virtually collocated in a premises which was initially prepared for virtual collocation, CLEC may elect, unless it is not practical for technical reasons or because of space limitations, to convert its virtual collocation to physical collocation at such premises in which case CLEC shall coordinate the construction and rearrangement with Qwest of its equipment (IDLC and transmission) and circuits for which CLEC shall pay Qwest at applicable rates, and pursuant to the other terms and conditions in this Agreement. In addition, all applicable physical collocation recurring charges shall apply.
- 40.3.3 CLEC will be allowed access to the POI on non-discriminatory terms. CLEC owns and is responsible for the installation, maintenance and repair of its equipment located within the space rented from Qwest.
- 40.3.4 CLEC must use leased space as soon as reasonably possible and may not warehouse space for later use or sublease to another provider. Physical collocation is offered on a space-available, first-come, first-served basis.
- 40.3.5 The minimum standard leasable amount of floor space is one hundred (100) square feet. CLEC must efficiently use the leased space and no more than fifty percent (50%) of the floor space **may be used for storage cabinets and work surfaces. CLEC and Qwest may negotiate other storage arrangements on a case-by-case basis.**¹⁹ **CLEC may store spares within its collocated space:**
- 40.3.6 CLEC's leased floor space will be separated from other competitive providers and Qwest space through cages or hard walls. CLEC may elect to have Qwest construct the cage, or choose from Qwest approved contractors to construct the cage, meeting U S WEST's installation Technical Publication 77350. Any deviation to CLEC's request must be approved.
- 40.3.7 The following standard features will be provided by Qwest:
- (a) Heating, ventilation and air conditioning.
 - (b) Smoke/fire detection and any other building code requirement.

¹⁸ AT&T Order, p. 8 at Issue 9c.

¹⁹ AT&T Order, p. 10 at Issue 10(a).

40.3.8 Qwest Responsibilities

- (a) Design the floor space within each location which will constitute CLEC's leased space.
- (b) Ensure that the necessary construction work is performed on a timely basis to build CLEC's leased physical space and the riser from the vault to the leased physical space.
- (c) Develop a quotation specific to CLEC's request.
- (d) Extend Qwest-provided and owned fiber optic, **copper or coaxial**²⁰ cable, whichever is more efficient, from the POI through the cable vault and extend the cable to CLEC's leased physical space or place the cable in fire retardant tubing prior to extension to CLEC's leased physical space.
- (e) Installation and maintenance and all related activity necessary to provide Channel Termination between Qwest's and CLEC's equipment.
- (f) Work cooperatively with CLEC in matters of joint testing and maintenance.

40.3.9 CLEC Responsibilities

- (a) Determine the type of enclosure for the physical space.
- (b) Procure, install and maintain fiber optic, **copper or coaxial**²¹ facilities up to the Qwest designated POI.
- (c) Provide for installation, maintenance, repair and service of all CLEC's equipment located in the leased physical space.
- (d) Ensure that all equipment installed by CLEC complies with Bellcore Network Equipment Building System Generic Equipment requirements, Qwest environmental and transmission standards, and any statutory (local, federal, or state) or regulatory requirements in effect at the time of equipment installation or that subsequently become effective.

- 40.3.10 The installation of any Interconnection service will be coordinated between the Parties so that CLEC may utilize those services once CLEC has accepted its leased physical space.

²⁰ AT&T Order, p. 10, Issue 10(a).

²¹ AT&T Order, p. 10, Issue 10(a).

- 40.3.11 If, at any time, Qwest reasonably determines that the equipment or the installation does not meet standard industry requirements, such failure being due to actions of CLEC or its agents, CLEC will be responsible for the costs associated with the removal, modification to, or installation of the equipment to bring it into compliance. If CLEC fails to correct any non-compliance within thirty (30) calendar days or as soon as reasonably practical after the receipt of written notice of non-compliance, Qwest may have the equipment removed or the condition corrected at CLEC's expense.
- 40.3.12 If, during installation, Qwest reasonably determines that CLEC activities or equipment are unsafe, non-industry standard or in violation of any applicable laws or regulations, Qwest has the right to stop work until the situation is remedied. If such conditions pose an immediate threat to the safety of personnel, interfere with the performance of Qwest's service obligations, or pose an immediate threat to the physical integrity of the conduit system or the cable facilities, Qwest may perform such work and/or take action as is necessary to correct the condition at CLEC's expense.
- 40.3.13 Qwest shall provide basic telephone service with a connection jack as requested by CLEC from Qwest for the collocated space. Upon CLEC's request and following the normal provisioning process, this service shall be available at the CLEC collocated space on the day the space is turned over to CLEC by Qwest.
- 40.3.14 Where available, Qwest shall provide access to eyewash stations, bathrooms, and drinking water within the collocated facility on a twenty-four (24) hour per day, seven (7) day per week basis for CLEC personnel and its designated agents.
- 40.3.15 Qwest shall provide CLEC with written notice five (5) Business Days prior to those instances where Qwest or its subcontractors may be performing work that could reasonably potentially affect CLEC's service. Qwest will make reasonable efforts to inform CLEC by telephone of any emergency related activity prior to the start of the activity that Qwest or its subcontractors may be performing that could reasonably potentially affect CLEC's service, so that CLEC can take any action required to monitor or protect its service.
- 40.3.16 Qwest shall provide information regarding the location, type, and cable termination requirements (i.e., connector type, number and type of pairs, and naming convention) for Qwest point of termination to CLEC within five (5) Business Days of CLEC's acceptance of Qwest's quote for collocated space.
- 40.3.17 Qwest shall provide the dimensions for CLEC outside plant fiber ingress and egress into CLEC collocated space within five (5) Business Days of CLEC's acceptance of Qwest's quote for collocated space.
- 40.3.18 Qwest shall provide the sizes and number of power feeders for the collocated space to CLEC within ten (10) Business Days of CLEC's acceptance of Qwest's quote for collocated space.

40.3.19 Qwest shall provide positive confirmation to CLEC when construction of CLEC collocated space is fifty percent (50%) completed. This confirmation shall also include confirmation of the scheduled completion and turnover dates.

40.3.20 [Intentionally left blank for numbering consistency]

40.3.21 With the exception of Subparagraph (b) below, Qwest shall provide the following information to CLEC within five (5) Business Days or as reasonably necessary upon receipt of a written request from CLEC:

- (a) additional work restriction guidelines.
- (b) Qwest or industry technical publication guidelines that impact the design of Qwest collocated equipment, unless such documents are already in the possession of CLEC. The following U S WEST Technical Publications provide information regarding central office equipment and collocation guidelines:

- 77350 Central Office Telecommunications Equipment Installation and Removal Guidelines
- 77351 Central Office Telecommunications Equipment Engineering Standards
- 77355 Grounding - Central Office and Remote Equipment Environment
- 77386 Expanded Interconnection and Collocation for Private Line Transport and Switched Access Services

CLEC may obtain the above documents from:

Faison Office Products Company
3251 Revere St., Suite 200
Aurora, Colorado 80011
(303) 340-3672

- (c) appropriate Qwest contacts (names and telephone numbers) for the following areas:

Engineering
Physical & Logical Security
Provisioning
Billing
Operations
Site and Building Managers
Environmental and Safety

- (d) escalation process for the Qwest employees (names, telephone numbers and the escalation order) for any disputes or problems that might arise pursuant to CLEC's collocation.

40.3.22 Power as referenced in this Agreement refers to any electrical power source supplied by Qwest for CLEC equipment. Qwest will supply power to support CLEC equipment at equipment specific DC and AC voltages. At a minimum, Qwest shall supply power to CLEC at parity with that provided by Qwest to itself. If Qwest performance, availability or restoration falls below industry standards, Qwest shall bring itself into compliance with such industry standards as soon as technologically feasible.

- (a) Central office power supplied by Qwest into the CLEC equipment area, shall be supplied in the form of power feeders (cables) on cable racking into the designated CLEC equipment area. The power feeders (cables) shall efficiently and economically support the requested quantity and capacity of CLEC equipment. The termination location shall be mutually agreed upon by the Parties.
- (b) Qwest power equipment supporting CLEC's equipment shall:
 - i. comply with applicable industry standards (e.g., Bellcore, NEBS, IEEE, UL, and NEC) or manufacturer's equipment power requirement specifications for equipment installation, cabling practices, and physical equipment layout;
 - ii. have redundant power feeds with physical diversity and battery back-up as required by the equipment manufacturer's specifications for CLEC equipment, or, at minimum, at parity with that provided for similar Qwest equipment at that location;
 - iii. provide central office ground, connected to a ground electrode located within the CLEC collocated space, at a level above the top of CLEC equipment plus or minus two (2) feet to the left or right of CLEC's final request;
 - iv. provide an installation sequence and access that will allow installation efforts in parallel without jeopardizing personnel safety or existing services of either Party;
 - v. provide cabling that adheres to Bell Communication Research (Bellcore) Network Equipment-Building System (NEBS) standards TR-EOP-000063;
 - vi. provide Lock Out-Tag Out and other electrical safety procedures and devices in conformance with the most stringent of OSHA or industry guidelines; and
 - vii. ensure that installed equipment meets Bellcore specifications.

40.4 Collocation Rate Elements

40.4.1 Common Rate Elements

The following rate elements are common to both virtual and physical collocation:

- (a) Quote Preparation Fee. This covers the work involved in developing a quotation for CLEC for the total costs involved in its collocation request.
- (b) Entrance Facility. Provides for fiber optic cable on a per two (2) fiber increment basis from the point of interconnection utilizing Qwest owned, conventional single mode type of fiber optic cable to the collocated equipment (for virtual collocation) or to the leased space (for physical collocation). Entrance facility includes riser, fiber placement, entrance closure, conduit/innerduct, and core drilling.
- (c) Cable Splicing. Represents the labor and equipment to perform a subsequent splice to the CLEC provided fiber optic cable after the initial installation splice. Includes a per-setup and a per-fiber-spliced rate elements.
- (d) 48 Volt Power. Provides 48 volt power to the CLEC collocated equipment. Charged on a per ampere basis.
- (e) 48 Volt Power Cable. Provides for the transmission of -48 Volt DC power to the collocated equipment. It includes engineering, furnishing and installing the main distribution bay power breaker, associated power cable, cable rack and local power bay to the closest power distribution bay. It also includes the power cable (feeders) A and B from the local power distribution bay to the leased physical space (for physical collocation) or to the collocated equipment (for virtual collocation).
- (f) Inspector Labor. Provides for the Qwest qualified personnel necessary when CLEC requires access to the POI after the initial installation or access to its physical collocation floor space, where an escort is required. A call-out of an inspector after business hours is subject to a minimum charge of four (4) hours. Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00 am to 5:00 pm and after business hours are after 5:00 pm and before 8:00 am, Monday through Friday, all day Saturday, Sunday and holidays.
- (g) Expanded Interconnection Channel Regeneration. Required when the distance from the leased physical space (for physical collocation) or from the collocated equipment (for virtual collocation) to the Qwest network is of sufficient length to require regeneration.
- (h) Qwest will provide external synchronization when available.

- (i) Qwest will provide 20 hertz ringing supply when available.

40.4.2 Physical Collocation Rate Elements

The following rate elements apply only to physical collocation arrangements:

- (a) **Enclosure Buildout.** The Enclosure Buildout element, either Cage or Hardwall, includes the material and labor to construct the enclosure specified by CLEC or CLEC may choose from Qwest approved contractors to construct the cage, meeting U S WEST's installation Technical Publication 77350. It includes the enclosure (cage or hardwall), air conditioning (to support CLEC loads specified), lighting (not to exceed 2 watts per square foot), and convenience outlets (3 per cage or the number required by building code for the hardwall enclosure). Also provides for humidification, if required. Pricing for Enclosure Buildout will be provided on an individual basis due to the uniqueness of CLEC's requirements, central office structure and arrangements.
- (b) **Floor Space Rental.** This element provides for the rental of the floor space provided to CLEC pursuant to a physical collocation arrangement.

40.4.3 Virtual Collocation Rate Elements

The following rate elements apply only to virtual collocation arrangements:

- (a) **Maintenance Labor.** Provides for the labor necessary for repair of out of service and/or service-affecting conditions and preventative maintenance of the CLEC virtually collocated equipment. CLEC is responsible for ordering maintenance spares. Qwest will perform maintenance and/or repair work upon receipt of the replacement maintenance spare and/or equipment for CLEC. A call-out of a maintenance technician after business hours is subject to a minimum charge of four (4) hours. Maintenance Labor, Inspector Labor, Engineering Labor and Equipment Labor business hours are considered to be Monday through Friday, 8:00 am to 5:00 pm and after business hours are after 5:00 pm and before 8:00 am, Monday through Friday, all day Saturday, Sunday and holidays.
- (b) **Training Labor.** Provides for the billing of vendor-provided training for Qwest personnel on a metropolitan service area basis, necessary for CLEC virtually collocated equipment which is different from equipment used by Qwest. Qwest will require three (3) Qwest employees to be trained per metropolitan service area in which the CLEC virtually collocated equipment is located. If, by an act of Qwest, trained employees are relocated, retired, or are no longer available, Qwest will not require CLEC to provide training for additional Qwest employees for the same virtually collocated equipment in the same metropolitan area. Fifty percent (50%) of the amount of training billed to CLEC will be refunded to CLEC, should a second

collocator or Qwest in the same metropolitan area select the same virtually collocated equipment as CLEC. The second collocator or Qwest will be charged one half of the original amount paid by CLEC for the same metropolitan area.

- (c) Equipment Bay. Provides mounting space for the CLEC virtually collocated equipment. Each bay includes the seven (7) foot bay, its installation, and all necessary environmental supports. Mounting space on the bay, including space for the fuse panel and air gaps necessary for heat dissipation is limited to 78 inches. The monthly rate is applied per shelf.
- (d) Engineering Labor. Provides the planning and engineering of the CLEC virtually collocated equipment at the time of installation, change or removal.
- (e) Installation Labor. Provides for the installation, change or removal of the CLEC virtually collocated equipment.

40.5. Collocation Installation Intervals

40.5.1 Qwest shall have a period of thirty (30) calendar days after receipt by CLEC of a Request for Collocation to provide CLEC with a written quotation containing all nonrecurring charges and fees for the requested collocation (the "Quotation Preparation Period"). CLEC shall make payment of fifty percent (50%) of the nonrecurring charges and fees upon acceptance of the quotation ("Initial Payment") with the remainder due upon completion of the construction. In the event CLEC disputes the amount of Qwest's proposed nonrecurring charges and fees, CLEC shall deposit fifty percent (50%) of the nonrecurring charges and fees into an interest bearing escrow account prior to the commencement of construction ("Initial Deposit"). The remainder of the nonrecurring charges and fees shall be deposited into the escrow account upon completion of the construction. Upon resolution of the dispute, the escrow agent shall distribute amounts in the account in accordance with the resolution of such dispute and any interest that has accrued with respect to amounts in the account shall be distributed proportionately to the Parties. Qwest shall complete installation pursuant to the CLEC Request for Collocation within a maximum of three (3) months after the Initial Payment or Initial Deposit for physical or virtual collocation. If there is a dispute between Qwest and CLEC regarding the amount of any nonrecurring charges and fees, such dispute shall be resolved in accordance with Section 27 above. The pendency of any such dispute shall not affect the obligation of Qwest to complete collocation within the installation intervals described above.

41. Technical References - Collocation

Subject to Sections 1.3.1 and 1.3.2 of this Part A of this Agreement, Qwest shall provide collocation in accordance with the following standards:

- 41.1 Institute of Electrical and Electronics Engineers (IEEE) Standard 383, IEEE Standard for Type Test of Class 1 E Electric Cables, Field Splices, and Connections for Nuclear Power Generating Stations;
- 41.2 National Electrical Code (NEC), use most recent issue;
- 41.3 TA-NPL-000286, NEBS Generic Engineering Requirements for System Assembly and Cable Distribution, Issue 2 (Bellcore, January 1989);
- 41.4 TR-EOP-000063 Network Equipment-Building System (NEBS) Generic Equipment Requirements, Issue 3, March 1988;
- 41.5 TR-EOP-000151, Generic Requirements for 24-, 48-, 130-, and 140- Volt Central Office Power Plant Rectifiers, Issue 1 (Bellcore, May 1985);
- 41.6 TR-EOP-000232, Generic Requirements for Lead-Acid Storage Batteries, Issue 1 (Bellcore, June 1985);
- 41.7 TR-NWT-000154, Generic Requirements for 24-, 48-, 130, and 140- Volt Central Office Power Plant Control and Distribution Equipment, Issue 2 (Bellcore, January 1992);
- 41.8 TR-NWT-000295, Isolated Ground Planes: Definition and Application to Telephone Central Offices, Issue 2 (Bellcore, July 1992);
- 41.9 TR-NWT-000840, Supplier Support Generic Requirements (SSGR), (A Module of LSSGR, FR-NWT-000064), Issue 1 (Bellcore, December 1991);
- 41.10 TR-NWT-001275 Central Office Environment Installations/Removal Generic Requirements, Issue 1, January 1993; and
- 41.11 Underwriters' Laboratories Standard, UL 94.

42. Number Portability

42.1 Interim Number Portability (INP)

42.1.1 General Terms

- (a) The Parties shall provide Interim Number Portability (INP) on a reciprocal basis to the extent technically feasible.
- (b) Until permanent number portability is implemented by the industry pursuant to regulations issued by the FCC or the Commission, the Parties agree to provide INP to each other through Remote Call Forwarding, Direct Inward Dialing, or other appropriate means as agreed to by the Parties.
- (c) Once permanent number portability is implemented pursuant to FCC or Commission regulation, either Party may withdraw, at any time and at its

sole discretion, its INP offerings, subject to advance notice to the other Party with sufficient time to allow for coordination to allow the seamless and transparent conversion of INP Customer numbers to permanent number portability. Upon implementation of permanent number portability pursuant to FCC regulations, both Parties agree to conform and provide such permanent number portability. The Parties agree to expeditiously convert Customers from interim number portability to permanent number portability, provided that the interim service is not removed until the Customer has been converted.

- (d) Qwest will update and maintain its Line Information Database ("LIDB") listings for numbers retained by CLEC and its Customer, and restrict or cancel calling cards associated with these forwarded numbers as directed by CLEC. Further, Qwest will not block third party and collect calls to those numbers unless requested by CLEC.
- (e) The ordering Party shall specify, on a per telephone number basis, which method of INP is to be employed and the providing Party shall provide such method to the extent technically feasible.
- (f) Where either Party has activated an entire NXX, or activated a substantial portion of an NXX with the remaining numbers in that NXX either reserved for future use or otherwise unused, if these Customer(s) choose to receive service from the other Party, the first Party shall cooperate with the second Party to have the entire NXX reassigned in the LERG (and associated industry databases, routing tables, etc.) to an End Office operated by the second Party. Such transfer will be accomplished with appropriate coordination between the Parties and subject to appropriate industry lead-times for movement of NXXs from one switch to another.

42.1.2 Description Of Service

- (a) Interim Number Portability Service ("INP") is a service arrangement that can be provided by Qwest to CLEC or by CLEC to Qwest.
- (b) INP applies to those situations where an end-user Customer elects to change service providers, and such Customer also wishes to retain its existing or reserved telephone number(s). INP consists of providing the capability to route calls placed to telephone numbers assigned to one Party's switches to another Party's switches.
- (c) INP is available as INP-Remote Call Forwarding ("INP-RCF") permitting a call to a Qwest assigned telephone number to be translated to CLEC's dialable local number. CLEC may terminate the call as desired. Additional capacity for simultaneous call forwarding is available where technically feasible on a per path basis. CLEC will need to specify the number of simultaneous calls to be forwarded for each number ported.

Part A

- (d) DID is another INP method that makes use of direct inward dialing trunks. Each DID trunk group used for INP is dedicated to carrying DID INP traffic between the Qwest end office and the CLEC switch. Traffic on these trunks cannot overflow to other trunks, so the number of trunks shall be conservatively engineered by Qwest. Also, inter-switch signaling is usually limited to multi-frequency (MF). This precludes passing Calling Line ID to the CLEC switch.
- (e) RI-PH will route a dialed call to the Qwest switch associated with the NXX of the dialed number. The Qwest switch shall then insert a prefix onto the dialed number which identifies how the call is to be routed to CLEC. The prefixed dialed number is transmitted to the Qwest tandem switch to which CLEC is connected. Route indexing is only available with seven (7) digit local dialing.
- (f) The prefix is removed by the operation of the tandem switch and the dialed number is routed to CLEC's switch so the routing of the call can be completed by CLEC.
 - i. DN-RI is a form of RI-PH that requires direct trunking between the Qwest switch to which the ported number was originally assigned and the CLEC switch to which the number has been ported. The Qwest switch shall send the originally dialed number to the CLEC switch without a prefix.
 - ii. Qwest shall provide RI-PH or DN-RI on an individual telephone number basis, as designated by CLEC. Where technically feasible, calls to ported numbers are first directed to the CLEC switch over direct trunks but may overflow to tandem trunks if all trunks in the direct group are occupied.
 - iii. For both RI-PH and DN-RI the trunks used may, at CLEC's option, be the same as those used for exchange of other local traffic with Qwest. At CLEC's option, the trunks shall employ SS7 or in band signaling and may be one way or two way.
- (g) INP is subject to the following restrictions:
 - i. An INP telephone number may be assigned by CLEC only to CLEC's Customers located within Qwest's local calling area and toll rating area that is associated with the NXX of the ported number. This is to prevent the possibility of Customers using number portability to extend the local calling area.
 - ii. INP is applicable only if CLEC is engaged in a reciprocal traffic exchange arrangement with Qwest.

- iii. INP is not offered for NXX Codes 555, 976, 960 and 1+ sent-paid telephones, and Service Access Codes (i.e., 500, 700, 800/888, 900). INP is not available for FGA seven-digit numbers (including foreign exchange (FEX), FX and FXONAL and foreign Central Office service).. Furthermore, INP numbers may only be used consistent with network efficiency and integrity, i.e., inhibitions on mass calling events.
- iv. The ported telephone number will be returned to the switch which originally had the ported number when the ported service is disconnected. The normal intercept announcement will be provided by the porting company for the period of time until the telephone number is reassigned.
- v. Within thirty (30) days after the Effective Date of this Agreement, Qwest shall provide CLEC a list of those features that are not available for INP telephone numbers due to technical limitations.

42.1.3 Ordering and Maintenance

- (a) CLEC is responsible for all direct interactions with CLEC's end users with respect to ordering and maintenance.
- (b) Qwest shall exchange with CLEC SS7 TCAP messages as required for the implementation of Custom Local Area Signaling Services (CLASS) or other features available in the Qwest network.
- (c) Each Party's designated INP switch must return answer and disconnect supervision to the other Party's switch.
- (d) Qwest shall disclose to CLEC any technical or capacity limitations that would prevent use of a requested INP in a particular switching office.
- (e) The Parties will develop and implement an efficient deployment process to ensure call routing integrity for toll and local calls, with the objective to eliminate Customer downtime.
- (f) For INP, CLEC shall have the right to use the existing Qwest 911 infrastructure for all 911 capabilities. When RCF is used for CLEC subscribers, both the ported numbers and shadow numbers shall be stored in the ALI databases. CLEC shall have the right to verify the accuracy of the information in the ALI databases via direct connection to the SCC ALI database pursuant to the same process and procedures SCC makes available to Qwest.

42.2 Permanent Number Portability (PNP)

- 42.2.1 Upon implementation of Permanent Number Portability (PNP) pursuant to FCC regulations, both Parties agree to conform and provide such Permanent Number Portability. To the extent consistent with the FCC rules as amended from time to time, the requirements for PNP shall include the following:
- 42.2.2 Subscribers must be able to change local service providers and retain the same telephone number(s) consistent with FCC rules and regulations.
- 42.2.3 The PNP network architecture shall not subject alternate local exchange carriers to any degradation of service compared to Qwest in any relevant measure, including transmission quality, switching and transport costs, increased call set-up time and post-dial delay, and CLEC shall not be required to rely on the Qwest network for calls completing to its ported Customers.
- 42.2.4 When an office is equipped with PNP, in accordance with the procedures specified by the North American Numbering Council, the NXXs in the office shall be defined as portable and translations will be changed in the Parties' switches to open those NXXs for database queries.
- 42.2.5 When an NXX is defined as portable, it shall also be defined as portable in all PNP-capable offices which have direct trunks to the given switch.
- 42.2.6 Upon introduction of PNP in an Metropolitan Statistical Area ("MSA"), the applicable switches will be converted according to a published schedule with no unreasonable delay. All portable NXXs shall be recognized as portable, with queries launched from these switches.
- 42.2.7 Prior to implementation of PNP, the Parties agree to develop, implement, and maintain efficient methods to maintain 911 database integrity when a subscriber ports to another service provider. The Parties agree that the Customer should not be dropped from the 911 database during the transition.
- 42.2.8 When a subscriber ports to another service provider and has previously secured a reservation of line numbers from the donor provider for possible activation at some future point, these reserved but inactive numbers shall "port" along with the active numbers being ported by the subscriber. So long as CLEC maintains the reserved numbers, Qwest shall not reassign said numbers. The Parties will allocate the revenue generated from number reservations in accordance with a schedule to be mutually agreed upon by the Parties within ninety (90) days of the Effective Date of this Agreement.
- 42.2.9 During the process of porting a subscriber, the donor service provider shall implement the 10-Digit trigger feature, when the technology is made available in each switch in accordance with the schedules adopted by the FCC. When the donor provider receives the porting request, the unconditional trigger shall be applied to the subscriber's line at the time that has been agreed to via the Western

Region LNP Operations Guidelines in order to overcome donor network time delays in the disconnection of the subscriber. Alternatively, when an activation notice is sent to an NPAC to trigger a broadcast to service provider databases, the donor switch shall have its translations changed to disconnect the subscriber's line within thirty (30) minutes or less after the donor network Local SMS's has received the broadcast. Porting requests that require coordination between service providers, in accordance with the guidelines, will be handled on a case-by-case basis and will not be covered by the above.

42.2.10 Both CLEC and Qwest shall:

- (a) support all emergency and operator services.
- (b) use scarce numbering resources efficiently and administer such resources in a competitively neutral manner.
- (c) jointly cooperate with each other to provide the information necessary to rate and bill all types of calls.
- (d) jointly cooperate with each other to apply PNP consistently on a nationwide basis, and in accordance with all FCC directives.

42.2.11 A ten-digit code, consistent with the North American Numbering Plan, shall be used as a network address for each switch that terminates subscriber lines, i.e., an end office. This address shall support existing six-digit routing and may be implemented without changes to existing switch routing algorithms. In existing end offices, this address shall be selected from one of its existing NPA-NXXs. New end offices shall be assigned an address through normal administrative processes.

42.2.12 PNP employs an "N-1" (N minus 1) Query Strategy for interLATA or intraLATA toll calls, by which the originating carrier will pass the call to the appropriate toll carrier who will perform a query to an external routing database and efficiently route the call to the appropriate terminating local carrier either directly or through an access tandem office.

42.2.13 Qwest shall furnish CLEC with the first six (6) digits of the originating address when it supplies CLEC with the Jurisdiction Information Parameter for the originating address message.

42.2.14 Qwest agrees to begin the introduction of PNP to end user subscribers who may begin changing local service providers and retaining their existing telephone number based on the time line set out by the FCC in its Telephone Number Portability Order (CC Docket No. 95-116), or in accordance with a Commission order if such time for introduction of PNP set by the Commission is earlier than would result under the FCC Order.

42.2.15 The generic requirements for the PNP alternative will be implemented in accordance with industry-standard specifications.

- 42.2.16 For a local call to a ported number, the originating carrier is the "N-1" carrier. It will perform an external database query as soon as the call reaches the first PNP-capable switch in the call path and pass the call to the appropriate terminating carrier. A PNP-capable originating switch shall query on a local call to a portable NXX as soon as it determines that it (the originating switch) does not serve the dialed number.
- 42.2.17 Qwest shall be the default carrier for database queries where CLEC is unable to perform its own query due to abnormal conditions. CLEC shall be the default carrier for database queries where Qwest is unable to perform its own query due to abnormal conditions.
- 42.2.18 Qwest will provide CLEC PNP for subscribers moving to a different location, or staying at the same location, within the same rate center area.
- 42.2.19 Qwest will work cooperatively with other local service providers to establish the Western Region Number Portability Administration Center/Service Management System (SMS). The SMS shall be administered by a neutral third party to provide for the efficient porting of numbers between carriers. There must be one (1) exclusive NPAC per portability State or region, and Qwest shall provide all information uploads and downloads regarding ported numbers to/from, respectively, the exclusive NPAC. Qwest and CLEC shall cooperate to facilitate the expeditious deployment of PNP through the process prescribed by the FCC, including, but not limited to, participation in the selection of a neutral third party and development of SMS, as well as SMS testing for effective procedures, electronic system interfaces, and overall readiness for use consistent with that specified for provisioning in this Agreement.

42.3 Requirements for INP and NP

42.3.1 [Intentionally left blank for numbering consistency]

42.3.2 Cut-Over Process

The Parties shall cooperate in the process of porting numbers from one carrier to another so as to limit service outage for the ported subscriber. This shall include, but not be limited to, each Party updating its respective network element translations within fifteen (15) minutes following notification by the industry SMS, or ported-to local service provider, and deploying such temporary translations as may be required to minimize service outage, e.g., unconditional triggers. In addition, CLEC shall have the right to determine who initiates the order for INP in specific cut-over situations. The time frames in this paragraph shall be pursuant to Generic Requirements for SCP Application and GTT Function for Number Portability, Issue 0.99, January 6, 1997 and subsequent versions which may be adopted from time to time. The Parties shall cooperate to review and, if necessary, adjust the above time frame based on their actual experiences.

42.3.3 Testing

Qwest and CLEC shall cooperate in conducting CLEC's testing to ensure interconnectivity between systems. Qwest shall inform CLEC of any system updates that may affect the CLEC network and Qwest shall, at CLEC's request, perform tests to validate the operation of the network. Additional testing requirements may apply as specified by this Agreement.

42.3.4 Engineering and Maintenance

- (a) Qwest and CLEC will cooperate to ensure that performance of trunking and signaling capacity is engineered and managed at levels which are at least the same level of service as provided by Qwest to its subscribers and to ensure effective maintenance testing through activities such as routine testing practices, network trouble isolation processes and review of operational elements for translations, routing and network fault isolation.
- (b) Additional specific engineering and maintenance requirements shall apply as specified in this Agreement.

42.3.5 Recording and Billing

The Parties shall provide each other with accurate billing and subscriber account record exchange data necessary for billing their subscribers whose numbers have been ported.

42.3.6 Operator Services and Directory Assistance

With respect to operator services and directory assistance associated with NP for CLEC subscribers, Qwest shall provide the following:

- (a) While INP is deployed and prior to conversion to PNP:
 - i. The Parties acknowledge that technology, as of the Effective Date of this Agreement, does not permit the provision of BLV/BLI to ported numbers. When such becomes available in the Qwest network, such technology shall be made available to CLEC.
 - ii. Qwest shall allow CLEC to order provisioning of Telephone Line Number (TLN) calling cards and Billed Number Screening (BNS), in its LIDB, for ported numbers, as specified by CLEC. Qwest shall continue to allow CLEC access to its LIDB. Other LIDB provisions are specified in this Agreement.
 - iii. Where Qwest has control of Directory Listings for NXX codes containing ported numbers, Qwest shall maintain entries for ported numbers as specified by CLEC in accordance with the Listings Section of this Agreement.

(b) When PNP is in place:

- i. The provisions in Section 42.3.6 preceding, shall apply when PNP is in place.
- ii. If Integrated Services Digital Network User Part (ISUP) signaling is used, Qwest shall provide the Jurisdiction Information Parameter in the SS7 Initial Address Message. (See Generic Switching and Signaling Requirements for Number Portability, Issue 1.0, February 12, 1996 (Editor - Lucent Technologies, Inc.)).
- iii. The Parties shall provide, when received from the NPAC, a 10-Digit Global Title Translation (GTT) Node for routing queries for TCAP-based operator services (e.g., LIDB). The acquiring company will provide the GTT to the NPAC. The NPAC will distribute this information to the donor company and all other parties.
- iv. Qwest OSS shall meet all requirements specified in "Generic Operator Services Switching Requirements for Number Portability," Issue 1.1, June 20, 1996, as updated from time to time.

43. Dialing Parity

- 43.1 The Parties shall provide dialing parity to each other as required under Section 251(b)(3) of the Act or state law or regulation as appropriate.
- 43.2 Qwest shall ensure that all CLEC Customers experience the same dialing parity as similarly-situated Customers of Qwest services, such that, for example, for all call types: (a) a CLEC Customer is not required to dial any greater number of digits than a similarly-situated Qwest Customer; and (b) the CLEC Customer may retain its local telephone number, so long as the Customer continues receiving service in the same central office serving area.

44. Directory Listings

44.1 Directory Listings General Requirements

- 44.1.1 This Section 44 pertains to Directory Listings requirements for the appearance of CLEC end user Directory Listings in directory assistance service or directory product.
- 44.1.2 Qwest shall include in its master Directory Listing database all list information for CLEC Customers.
- 44.1.3 Qwest shall not sell or license, nor allow any third party, the use of CLEC Customer Listings without the prior written consent of CLEC. Qwest shall not disclose nor allow any third party to disclose non-listed name or address information for any purpose other than what may be necessary to complete directory distribution.

- 44.1.4 CLEC Customer Listings in the Qwest Directory Assistance database and Directory Listing database shall be co-mingled with Listings of Qwest and other CLEC Customers.
- 44.1.5 Each CLEC Customer Primary Listing shall be provided, at no charge, the same white page listings that Qwest provides its Customers.
- 44.1.6 Each CLEC business Customer Primary Listing shall be provided, at no charge, the same yellow page classified courtesy Listings that Qwest provides its Customers.
- 44.1.7 Qwest shall also ensure that its directory publisher publishes all types of Listings for CLEC Customers that are available to Qwest Customers under the same terms, and conditions, including, but not limited to:
 - (a) Foreign listings
 - (b) Reference listings
 - (c) Information listings
 - (d) Alternate call listings
 - (e) Multi-line listings
 - (f) Multi-line/Multi-owner listings
- 44.1.8 CLEC end user Listings properly identified by CLEC as State, Local, and Federal government Listings shall be appropriately coded in the Qwest Directory Listing database. Qwest will provide government code information to CLEC.
- 44.1.9 The listing and handling of CLEC listed and non-listed telephone numbers shall be at least at parity with that provided by Qwest to its own Customers, including CLEC customers who have ported telephone numbers from Qwest.
- 44.1.10 Qwest shall ensure that its directory publisher publishes CLEC sales, service, billing, and repair information for business and residential Customers, along with the CLEC logo in the customer information/guide pages of each directory at no charge to CLEC.
- 44.1.11 Qwest is responsible for maintaining Listings, including entering, changing, correcting, rearranging and removing listings in accordance with CLEC orders. Upon request, and at least one (1) month prior to a given white page directory close, a method of reviewing and correcting Listings will be provided.
- 44.1.12 For white pages and yellow pages advertising, Qwest shall ensure that (a) Qwest's directory publisher sell such advertising on a nondiscriminatory basis to CLEC Customers, (b) charges for such advertising will be billed by Qwest's directory publisher in the same manner as it bills for Qwest's customers' advertisements, and (c) CLEC shall receive commissions or other compensation from Qwest's directory publisher on all compensation**

generated by such advertising at no less than the commission or compensation rate paid to Qwest or any of its Affiliates.²²

44.1.13 Qwest will permit CLEC Customers to place orders for Premium Listings and privacy listings. CLEC will be charged for Premium Listings and privacy listings at Qwest's general exchange tariff rates less the wholesale discount rate. The Premium and privacy listing charges will be billed to CLEC and itemized at the telephone number sub-account level.

44.1.14 Qwest shall ensure a third party distributes appropriate alphabetical and classified directories (white and yellow pages) and recycling services to CLEC Customers at parity with Qwest end users, including providing directories, a) upon establishment of new service; b) during annual mass distribution; and c) upon Customer request.

44.1.15 **At no charge, Qwest shall ensure that each directory cover indicates inclusion of CLEC customer listings.²³**

44.1.16 Qwest will provide the option of having CENTREX users listed when CLEC purchases CENTREX type services for resale.

44.1.17 **CLEC shall receive the same treatment as Qwest receives with respect to white and yellow page matters.²⁴**

44.2 Scope

44.2.1 CLEC grants Qwest a non-exclusive license to incorporate Listings information into its Directory Assistance database. CLEC shall select one of two options for Qwest's use of Listings and dissemination of Listings to third parties.

EITHER:

- (a) Treat the same as Qwest's end user listings - No prior authorization is needed for Qwest to release Listings to directory publishers or other third parties. Qwest will incorporate Listings information in all existing and future Directory Assistance applications developed by Qwest. CLEC authorizes Qwest to sell and otherwise make Listings available to directory publishers. Listings shall not be provided or sold in such a manner as to segregate end users by carrier.

²² Procedural Order, July 14, 1997, pages 6-8.

²³ Arizona Bench Order, May 29, 1997, p. 1600, Procedural Order, July 14, 1997 at page 9.

²⁴ Arizona Bench Order, May 29, 1997, p. 1600, Procedural Order, July 14, 1997 at page 9.

OR:

- (b) Restrict to Qwest's Directory Assistance services -- Prior authorization required from CLEC for all other uses. CLEC makes its own, separate agreements with Qwest, third Parties and directory publishers for all uses of its listings beyond DA. Qwest will sell or provide Listings to directory publishers (including Qwest's publisher affiliate) or other third Parties only after the third party presents proof of CLEC's authorization. Listings shall not be provided or sold in such a manner as to segregate end users by carrier.
- (c) **Qwest shall be entitled to retain all revenue associated with any sales pursuant to subparagraphs (a) and (b) above.²⁵**

44.3 Qwest will take reasonable steps in accordance with industry practices to accommodate non-published and non-listed Listings provided that CLEC has supplied Qwest the necessary privacy indicators on such Listings.

44.4 CLEC Responsibilities

- 44.4.1 CLEC agrees to provide to Qwest its end user names, addresses and telephone numbers in a standard mechanized format, as utilized by Qwest.
- 44.4.2 CLEC will supply its ACNA/CIC or CLCC/OCN, as appropriate, with each order to provide Qwest the means of identifying listings ownership.
- 44.4.3 CLEC represents the end user information provided to Qwest is accurate and correct. CLEC further represents that it has reviewed all listings provided to Qwest, including end user requested restrictions on use such as non-published and non-listed.
- 44.4.4 CLEC is responsible for dealings with, and on behalf of, CLEC's end users on the following subjects:
 - a) All end user account activity, e.g., end user queries and complaints.
 - b) All account maintenance activity, e.g., additions, changes, issuance of orders for Listings to Qwest.
 - c) Determining privacy requirements and accurately coding the privacy indicators for CLEC's end user information. If end user information provided by CLEC to Qwest does not contain a privacy indicator, no privacy restrictions will apply.

²⁵ Procedural order, July 14, 1997 at page 10.

45. [Intentionally left blank for numbering consistency]

46.²⁶ **Qwest Dex Issues**

Qwest and CLEC agree that certain issues, such as yellow page advertising, directory distribution, access to call guide pages, and yellow page listings, will be the subject of negotiations between CLEC and directory publishers, including Qwest Dex. Qwest acknowledges that CLEC may request Qwest to facilitate discussions between CLEC and Qwest Dex.

47. **Access to Poles, Ducts, Conduits, and Rights of Way**

47.1²⁷ Each Party shall provide the other Party nondiscriminatory access to poles, ducts, rights-of-way and conduits it controls on terms, conditions and prices as described herein. While the language in Section 47 describes the provision of poles, ducts, rights-of-way and conduits by Qwest to CLEC, the language in this Section shall apply reciprocally to the provision by CLEC to Qwest of poles, ducts, rights-of-way and conduits not used by CLEC to provide exclusively long distance services.²⁸

47.2 [Intentionally left blank for numbering consistency]

47.3 **Definitions**

"Poles, ducts, conduits and ROW" refer to all the physical facilities and legal rights which provide for access to pathways across public and private property. These include poles, pole attachments, ducts, innerducts, conduits, building entrance facilities, building entrance links, equipment rooms, remote terminals, cable vaults, telephone closets, building risers, rights-of-way, or any other requirements needed to create pathways. These pathways may run over, under, across or through streets, traverse private property, or enter multi-unit buildings. A Right-of-Way ("ROW") is the right to use the land or other property owned, leased, or controlled by any means by Qwest to place poles, ducts, conduits and ROW or to provide passage to access such poles, ducts, conduits and ROW. A ROW may run under, on, or above public or private property (including air space above public or private property) and shall include the right to use discrete space in buildings, building complexes, or other locations.

47.4 **Requirements**

47.4.1 Qwest shall make poles, duct, conduits and ROW available to CLEC upon receipt of a request for use within the time periods provided in this Section, providing all information necessary to implement such use and containing rates, terms and

²⁶ MCI Order, p. 23 at Issue 36 and AT&T Order Issue 70.

²⁷ MCI Order, p. 22 at Issue 35.

²⁸ MCI Order, p. 22 at Issue 35; Procedural Order, July 14, 1997 at pages 10-11.

conditions, including, but not limited to, maintenance and use in accordance with this Agreement and at least equal to those which it affords itself, its Affiliates and others. Other users of these facilities, including Qwest, shall not interfere with the availability or use of the facilities by CLEC.

- 47.4.2 Within ten (10) Business Days of CLEC's request for specific poles, ducts, conduits, or ROW, Qwest shall provide any information in its possession or available to it regarding the environmental conditions of such requested poles, ducts, conduits or ROW route or location including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in Qwest's possession or files, or the possession of an agent, contractor, employee, lessor, or tenant of Qwest's that holds such information on Qwest's behalf. If the poles, ducts, conduits or ROW contain such environmental contamination, making the placement of equipment hazardous, Qwest shall offer alternative poles, ducts, conduits or ROW for CLEC's consideration. Qwest shall allow CLEC to perform any environmental site investigations, including, but not limited to, Phase I and Phase II environmental site assessments, as CLEC may deem to be necessary.
- 47.4.3 Qwest shall not prevent or delay any third party assignment of ROW to CLEC.
- 47.4.4 Qwest shall offer the use of such poles, ducts, conduits and ROW it has obtained from a third party to CLEC, to the extent such agreement does not prohibit Qwest from granting such rights to CLEC. They shall be offered to CLEC on the same terms as are offered to Qwest. **Qwest shall exercise its eminent domain authority when necessary to expand an existing ROW over private property in order to accommodate a request from CLEC for access to such ROW.**²⁹ CLEC shall reimburse Qwest for Qwest's reasonable costs, if any, incurred as a result of the exercise of its eminent domain authority on behalf of CLEC in accordance with the provisions of this paragraph.
- 47.4.5 Qwest shall provide CLEC equal and non-discriminatory access to poles, ducts, conduit and ROW and any other pathways on terms and conditions equal to that provided by Qwest to itself or to any other Person. Further, Qwest shall not preclude or delay allocation of these facilities to CLEC because of the potential needs of itself or of any other Person, except a maintenance spare may be retained as described below.
- 47.4.6 Qwest shall not attach, or permit other entities to attach facilities on, within or overlashed to existing CLEC facilities without CLEC's prior written consent.
- 47.4.7 **Qwest agrees to provide current detailed engineering and other plant records and drawings for specific requests for poles, ducts, conduit and ROW, including facility route maps at a city level, and the fees and expenses incurred in providing such records and drawings, on the earlier of twenty (20)**

²⁹ AT&T Order, p. 30 at Issue 55.

Business Days from CLEC's request or the time within which Qwest provides this information to itself or any other Person.³⁰ Such information shall be of equal type and quality as that which is available to Qwest's own engineering and operations staff. Qwest shall also allow personnel designated by CLEC to jointly examine with Qwest personnel, at no cost to CLEC for such personnel, such engineering records and drawings for a specific routing at Qwest Central Offices and Qwest Engineering Offices upon ten (10) days' written notice to Qwest. Qwest acknowledges that the request for information and the subject matter related to the request made under this Section shall be treated as Proprietary Information.

47.4.8 Qwest shall provide to CLEC a Single Point of Contact for negotiating all structure lease and ROW arrangements.

47.4.9 Qwest shall provide information regarding the availability and condition of poles, ducts, conduit and ROW within five (5) Business Days of CLEC's request if the information then exists in Qwest's records (a records based answer) and within twenty (20) Business Days of CLEC's request if Qwest must physically examine the poles, ducts, conduits and ROW (a field based answer) ("Request"). CLEC shall have the option to be present at the field based survey and Qwest shall provide CLEC at least twenty-four (24) hours' notice prior to the start of such field survey. During and after this period, Qwest shall allow CLEC personnel to enter manholes and equipment spaces and view pole structures to inspect such structures in order to confirm usability or assess the condition of the structure. Qwest shall send CLEC a written notice confirming availability pursuant to the Request within such twenty (20) day period ("Confirmation").

47.4.10 Reservation. For the period beginning at the time of the Request and ending ninety (90) days following Confirmation, Qwest shall reserve such poles, ducts, conduit and ROW for CLEC that CLEC may reasonably request. CLEC shall pay an appropriate reservation fee mutually agreed upon by the Parties for such reservation and shall elect whether to accept the poles, ducts, conduits, or ROW within the ninety (90) day period following Confirmation. CLEC may accept such facilities by sending written notice to Qwest ("Acceptance").

47.4.10.1 Right of First Refusal. During the Reservation Period, if another party, including Qwest, makes a bona fide and good faith request for the use of any poles, ducts, conduits or ROW that CLEC has previously reserved, CLEC shall have a "right of first refusal" over these facilities. If CLEC chooses to exercise its right of first refusal, it shall do so by providing Qwest written notice of same within ten (10) Business Days following receipt of written notice from Qwest advising CLEC of the bona fide and good faith request.

³⁰ AT&T Order, p. 22, Issue 35.

- 47.4.10.2 Exercise of Right of First Refusal/Reservation.** To ensure proper use of reserved facilities, after the expiration of the reservation period or upon exercise of its right of first refusal, whichever occurs earlier, CLEC must begin paying the approved rate for access (whether or not it has actually installed conduit or cable) and shall begin construction on the facility within six (6) months, or release its reservation.
- 47.4.11 Reservation.** After Acceptance by CLEC, CLEC shall have six (6) months to begin attachment and/or installation of its facilities to the poles, ducts, conduit and ROW or request Qwest to begin make ready or other construction activities. Any such construction, installation or make ready by CLEC shall be completed by the end of one (1) year after Acceptance. CLEC shall not be in default of the 6-month or 1-year requirement above if such default is caused in any way by any action, inaction or delay on the part of Qwest or its Affiliates or subsidiaries.
- 47.4.12 Make Ready.** Qwest shall rearrange, modify and/or make ready existing poles, ducts, conduit and ROW where necessary and feasible to provide space for CLEC's requirements. Subject to the requirements above, the Parties shall endeavor to mutually agree upon the time frame for the completion of such work within five (5) days following CLEC's request; provided, however, that any such work required to be performed by Qwest shall be completed within sixty (60) days or a reasonable period of time based on standard construction intervals in the industry, unless otherwise agreed by CLEC in writing.
- 47.4.13 New Construction.** After Acceptance, Qwest shall complete any new construction, relocation or installation of poles, ducts, conduits or ROW required to be performed by Qwest or any Qwest construction, relocation or installation requested by CLEC within a reasonable period of time based on standard construction intervals in the industry or sixty (60) days after obtaining all governmental authority or permits necessary to complete such construction, relocation or installation. If Qwest anticipates that construction, relocation or installation will go beyond standard industry intervals or the sixty (60) day period, Qwest shall immediately notify CLEC and the Parties shall mutually agree on a completion date.
- 47.4.14** CLEC shall begin payment for the use of newly constructed poles, ducts, conduit, and ROW upon completion of such construction and installation and confirmation by appropriate testing methods that the facilities are in a condition ready to operate in CLEC's network or upon use (other than for testing) by CLEC, whichever is earlier.
- 47.4.15** CLEC shall make payment for construction, relocation, rearrangements, modifications and make ready in accordance with Section 3.5 of Attachment 1 of this Agreement.

47.4.16 CLEC shall begin payment for the use of existing poles, ducts, conduit and ROW within ninety (90) days following Confirmation.³¹

47.4.17 CLEC may, at its option, install its facilities on poles, ducts, conduit and ROW and use CLEC or CLEC designated personnel to attach its equipment to such Qwest poles, ducts, conduits and ROW.

47.4.18 If available, Qwest shall provide CLEC space in manholes for racking and storage of cable and other materials as requested by CLEC.

47.4.19 Qwest shall rearrange, modify and/or make ready any conduit system or poles with retired cable by removing such retired cable from conduit systems or poles to allow for the efficient use of conduit space and pole space. **Qwest shall take all reasonable steps to expand its facilities to accommodate CLEC's request, and shall do so in accordance with the time frames set forth in this Section 47.**³² Before denying access based on a lack of capacity, Qwest must explore potential accommodations with CLEC.

47.4.20 Where Qwest has innerducts which are not, at that time, being used or are not reserved as emergency or maintenance spare in accordance with FCC rules and regulations, Qwest shall offer such ducts for CLEC's use.

47.4.21 Where a spare innerduct does not exist, Qwest shall allow CLEC to install an innerduct in Qwest conduit, at CLEC's cost and expense. Qwest must review and approve any installation of innerduct in any Qwest's duct prior to the start of construction. Such approval shall not be unreasonably delayed, withheld or conditioned. CLEC shall provide notice to Qwest of any work activity not less than twenty-four (24) hours prior to the start of construction.

47.4.22 Where Qwest has any ownership or other rights to ROW to buildings or building complexes, or within buildings or building complexes, Qwest shall offer such ROW to CLEC.

- (a) Subject to the approval of the building owner, if required, the right to use any available space owned or controlled by Qwest in the building or building complex to install CLEC equipment and facilities;
- (b) Subject to the approval of the building owner, if required, ingress and egress to such space; and
- (c) Subject to the approval of the building owner, if required, the right to use electrical power at parity with Qwest's rights to such power.

³¹ MCIm Order, p. 22 at Issue 35.

³² AT&T Order, Issue 54.

- 47.4.23 Whenever Qwest intends to modify or alter any poles, ducts, conduits or ROW which contain CLEC's facilities, Qwest shall provide written notification of such action to CLEC so that CLEC may have a reasonable opportunity to add to or modify its facilities. CLEC shall advise Qwest, in writing, of its intentions to add or modify the facilities within fifteen (15) Business Days of Qwest's notification. If CLEC adds to or modifies its facilities according to this paragraph, CLEC shall bear a proportionate share of the costs incurred by Qwest in making such facilities accessible.
- 47.4.24 CLEC shall not be required to bear any of the costs of rearranging or replacing its facilities, if such rearrangement or replacement is required as a result of an additional attachment or the modification of an existing attachment sought by any entity other than CLEC, including Qwest.
- 47.4.25 Qwest shall maintain the poles, ducts, conduits and ROW at its sole cost. CLEC shall maintain its own facilities installed within the poles, ducts, conduits and ROW at its sole cost. In the event of an emergency, Qwest shall begin repair of its facilities containing CLEC's facilities within a reasonable time frame based on industry standards or a time frame requested by CLEC. If Qwest cannot begin repair within the requested time frame, upon notice and approval of Qwest, which approval shall not be unreasonably withheld, CLEC may begin such repairs without the presence of Qwest personnel. CLEC may climb poles and enter the manholes, handholds, conduits and equipment spaces containing Qwest's facilities in order to perform such emergency maintenance, but only until such time as qualified personnel of Qwest arrives ready to continue such repairs. For both emergency and non-emergency repairs, CLEC may use spare innerduct or conduits, including the innerduct or conduit designated by Qwest as emergency spare for maintenance purposes; provided, however, that CLEC may only use such spare conduit or innerduct for a maximum period of ninety (90) days.
- 47.4.26 In the event of a relocation necessitated by a governmental entity exercising the power of eminent domain, when such relocation is not reimbursable, all parties shall share pro rata in costs for relocating the base conduit or poles and shall each pay its own cost of cable and installation of the facilities in the newly rebuilt Qwest poles, ducts, conduits and ROW.

48. Bona Fide Request Process for Further Unbundling

- 48.1³³ Any request for Interconnection or access to an unbundled Network Element not already available via price lists, tariff, or as described herein shall be treated as a "Request" under this Section.

³³ The MCI Order, p. 9 at Issue 10, sets forth a stricter time line for Qwest to follow in responding to BFRs than does the following agreed-upon language. The Parties have subsequently agreed to the time frames as set forth in this Section.

- 48.2 Qwest shall use the Bona Fide Request ("BFR") process as described in this Section 48, to determine the technical feasibility of the requested Interconnection or Network Element(s) and, for those items found to be technically feasible, to provide the terms and timetable for providing the requested items. Additionally, elements, services and functions which are materially or substantially different from those services, elements or functions already provided by Qwest to itself, its Affiliates, Customers, or end users may, at the discretion of CLEC, be subject to this BFR process.
- 48.3 A Request shall be submitted in writing and, at a minimum, shall include: (a) a complete and accurate technical description of each requested Network Element or Interconnection; (b) the desired interface specifications; (c) a statement that the Interconnection or Network Element will be used to provide a Telecommunications Service; (d) the quantity requested; (e) the location(s) requested; and (f) whether CLEC wants the requested item(s) and terms made generally available. CLEC may designate a Request as Confidential.
- 48.4 Within forty-eight (48) hours of receipt of a Request, Qwest shall acknowledge receipt of the Request and review such Request for initial compliance with Subsection 48.3 above. In its acknowledgment, Qwest shall advise CLEC of any missing information reasonably necessary to move the Request to the preliminary analysis described in Subsection 48.5 below.
- 48.5 Unless otherwise agreed to by the Parties, within thirty (30) calendar days of its receipt of the Request and all information necessary to process it, Qwest shall provide to CLEC a preliminary analysis of the Request. As reasonably requested by CLEC, Qwest agrees to provide status updates to CLEC. Qwest will notify CLEC if the quote preparation fee, if any, will exceed \$5,000. CLEC will approve the continuation of the development of the quote prior to Qwest incurring any reasonable additional expenses. The preliminary analysis shall specify whether or not the requested Interconnection or access to an unbundled Network Element is technically feasible and otherwise qualifies as a Network Element or Interconnection as defined under the Act.
- 48.5.1 If Qwest determines during the thirty (30) day period that a Request is not technically feasible or that the Request otherwise does not qualify as a Network Element or Interconnection required to be provided under the Act, Qwest shall so advise CLEC as soon as reasonably possible of that fact, and promptly provide a written report setting forth the basis for its conclusion but in no case later than ten (10) calendar days after making such determination.
- 48.5.2 If Qwest determines during the thirty (30) day period that the Request is technically feasible and otherwise qualifies under the Act, it shall notify CLEC in writing of such determination, no later than ten (10) calendar days after making such determination.
- 48.5.3 Unless otherwise agreed to by the Parties, as soon as feasible, but no more than ninety (90) calendar days after Qwest notifies CLEC that the Request is technically feasible, Qwest shall provide to CLEC a Request quote which will include, at a minimum, a description of each Interconnection and Network Element, the quantity to be provided, the installation intervals (both initial and subsequent), the impact on

shared systems software interfaces, the ordering process changes, the functionality specifications, any interface specifications, and either:

- (a) the applicable rates (recurring and nonrecurring), including the amortized development costs, as appropriate pursuant to Section 48.5.4 below, of the Interconnection or Network Element; or
- (b) the payment for development costs, as appropriate pursuant to Section 48.5.4 below, of the Interconnection or Network Element and the applicable rates (recurring and nonrecurring), excluding the development costs.

48.5.4 The choice of using either option (a) or (b) above shall be at Qwest's sole discretion. A payment for development cost, however, is appropriate only where CLEC is the only conceivable user of the functionality (including consideration of Qwest as a potential user) or where the requested quantity is insufficient to provide amortization.

- 48.6 If Qwest has used option (a) above in its Request quote, then, within thirty (30) days of its receipt of the Request quote, CLEC must indicate its nonbinding interest in purchasing the Interconnection or Network Element at the stated quantities and rates, cancel its Request, or seek remedy under the dispute resolution section of this Agreement.
- 48.7 If Qwest has used option (b) above in its Request quote, then, within thirty (30) days of its receipt of the Request quote, CLEC must either agree to pay the development costs of the Interconnection or Network Element, cancel its Request, or seek remedy under the dispute resolution section of this Agreement.
- 48.8 If Qwest has used option (b) in its Request quote and CLEC has accepted the quote, CLEC may cancel the Request at any time, but will pay Qwest's reasonable development costs of the Interconnection or Network Element up to the date of cancellation.
- 48.9 Qwest will use reasonable efforts to determine the technical feasibility and conformance with the Act of the Request within the first thirty-two (32) days of receiving the Request. In the event Qwest has used option (b) above in its Request quote and Qwest later determines that the Interconnection or Network Element requested in the Request is not technically feasible or otherwise does not qualify under the Act, Qwest shall notify CLEC within ten (10) Business Days of making such determination and CLEC shall not owe any compensation to Qwest in connection with the Request. Any quotation preparation fees or development costs paid by CLEC to the time of such notification shall be refunded by Qwest.
- 48.10 To the extent possible, Qwest will utilize information from previously developed BFRs to address similar arrangements in order to shorten the response times for the currently requested BFR. In the event CLEC has submitted a Request for an Interconnection or a Network Element and Qwest determines in accordance with the provisions of this Section 48 that the Request is technically feasible, the Parties agree that CLEC's subsequent request or order for the identical type of Interconnection or Network Element shall not be subject to the BFR process. To the extent Qwest has deployed an identical Network Element under a previous BFR, a subsequent BFR is not required. For purposes of this Section 48.10, an

"identical" request shall be one that is materially identical to a previous request with respect to the information provided pursuant to Subsections (a) through (e) of Section 48.3 above.

- 48.11 In the event of a dispute under this Section 48, the Parties agree to seek expedited Commission resolution of the dispute, to be completed within twenty (20) days of Qwest's response denying CLEC's BFR, and in no event more than thirty (30) days after the filing of CLEC's petition. Alternatively, the Parties may mutually agree to resolve any disputes under this section through the dispute resolution process pursuant to Section 27, Part A of this Agreement.
- 48.12 All time intervals within which a response is required from one Party to another under this Section 48 are maximum time intervals. The Parties agree that they will provide all responses to the other Party as soon as the Party has the information and analysis required to respond, even if the time interval stated herein for a response is not over.

49. Audit Process

- 49.1 As used herein, "Audit" shall mean a comprehensive review of services performed under this Agreement. Either Party (the "Requesting Party") may perform up to three (3) Audits per 12-month period commencing with the Effective Date.
- 49.2 Upon thirty (30) days' written notice by the Requesting Party to the other Party (the "Audited Party"), the Requesting Party shall have the right, through its authorized representative, to make an Audit, during normal business hours, of any records, accounts and processes which contain information related to the services provided and performance standards agreed to under this Agreement. Within the above-described 30-day period, the Parties shall reasonably agree upon the scope of the Audit, the documents and processes to be reviewed, and the time, place and manner in which the Audit shall be performed. The Audited Party agrees to provide Audit support, including appropriate access to and use of the Audited Party's facilities (e.g., conference rooms, telephones, copying machines).
- 49.3 Each Party shall bear its own expenses in connection with the conduct of the Audit. The reasonable cost of special data extractions required by the Requesting Party to conduct the Audit will be paid for by the Requesting Party. For purposes of this Section 49.3, a "Special Data Extraction" shall mean the creation of an output record or informational report (from existing data files) that is not created in the normal course of business. If any program is developed to the Requesting Party's specifications and at the Requesting Party's expense, the Requesting Party shall specify at the time of request whether the program is to be retained by the Audited Party for reuse for any subsequent Audit. Notwithstanding the foregoing, the Audited Party shall pay all of the Requesting Party's external expenses (including, without limitation, the fees of any independent auditor), in the event an Audit results in an adjustment in the charges or in any invoice paid or payable by the Requesting Party hereunder in an amount that is, on an annualized basis, more than the greater of (a) one percent (1%) of the amount in dispute or (b) \$10,000.
- 49.4 Adjustments, credits or payments shall be made and any corrective action shall commence within thirty (30) days from the Audited Party's receipt of the final audit report to compensate for any errors or omissions which are disclosed by such Audit and are agreed

Part A

to by the Parties. The highest interest rate allowable by law for commercial transactions shall be assessed and shall be computed by compounding daily from the time of the original due date of the amount of dispute.

- 49.5 Neither such right to examine and audit nor the right to receive an adjustment shall be affected by any statement to the contrary appearing on checks or otherwise.
- 49.6 This Section 49 shall survive expiration or termination of this Agreement for a period of two (2) years after expiration or termination of this Agreement.
- 49.7 All transactions under this Agreement which are over thirty-six (36) months old are no longer subject to Audit.
- 49.8 All information received or reviewed by the Requesting Party or the independent auditor in connection with the Audit is to be considered Proprietary Information as defined by this Agreement. The Audited Party reserves the right to require any non-employee who is involved directly or indirectly in any Audit or the resolution of its findings as described above to execute a nondisclosure agreement satisfactory to the Audited Party. To the extent an Audit involves access to information of third parties, the Audited Party will aggregate such competitors' data before release to the Requesting Party, to insure the protection of the proprietary nature of information of other competitors. To the extent a competitor is an Affiliate of the Audited Party (including itself and its subsidiaries), the Parties shall be allowed to examine such Affiliate's disaggregated data, as required by reasonable needs of the Audit.
- 49.9 An "Examination" shall mean an inquiry reasonably requested by either Party into a specific element of or process where the requesting Party raises a dispute concerning services performed by the other Party under this Agreement and such dispute has not been resolved through the escalation process described in this Agreement. Only that information that is necessary to resolve the dispute in issue must be provided in the course of an Examination and the total time involved in an Examination for each Party may not exceed three (3) people for three (3) days. Appropriate provisions of this Section 49 that apply to Audits shall also apply to Examinations, except that either Party may conduct only a total of nine (9) Examinations and Audits per year, with a maximum of three (3) Audits per year.³⁴

50. Miscellaneous Services

50.1 Basic 911 and E911 General Requirements

- 50.1.1 Basic 911 and E911 provides a caller access to the appropriate emergency service bureau by dialing a 3-digit universal telephone number (911). Basic 911 and E911 access from Local Switching shall be provided to CLEC in accordance with the following:

³⁴ Arizona Bench Order, May 29, 1997 Hearing, p.1613.

Part A

- 50.1.2 Each Party will be responsible for those portions of the 911 System for which it has reasonable control, including any necessary maintenance to each Party's portion of the 911 System.
- 50.1.3 E911 shall provide additional routing flexibility for 911 calls. E911 shall use Customer data, contained in the Automatic Location Identification/Data Management System ("ALI/DMS"), to determine to which Public Safety Answering Point (PSAP) to route the call.
- 50.1.4 If available in the Qwest network, Qwest shall offer a third type of 911 service, S911. All requirements for E911 also apply to S911 with the exception of the type of signaling used on the interconnection trunks from the local switch to the E911 Tandem.
- 50.1.5 Basic 911 and E911 functions provided to CLEC shall be at least at parity with the support and services that Qwest provides to its Customers for such similar functionality.
- 50.1.6 Basic 911 and E911 access from Local Switching shall be provided to CLEC in accordance with the following:
 - 50.1.6.1 Qwest shall conform to all state regulations concerning emergency services.
 - 50.1.6.2 For E911 provided to resold lines or in association with unbundled switching, Qwest shall use its service order process to update and maintain Customer information in the ALI/DMS data base. Through this process, Qwest shall provide and validate Customer information resident or entered into the ALI/DMS data base.
- 50.1.7 Qwest shall provide for overflow 911 traffic consistent with Qwest policy and procedure.
- 50.1.8 Basic 911 and E911 access from the CLEC local switch shall be provided to CLEC in accordance with the following:
 - 50.1.8.1 If required by CLEC, Qwest shall interconnect direct trunks from the CLEC network to the E911 Tandem for connection to the PSAP. Such trunks to the E911 Tandem may alternatively be provided by CLEC.
 - 50.1.8.2 In government jurisdictions where Qwest has obligations under existing agreements as the primary provider of the 911 System to the county, CLEC shall participate in the provision of the 911 System as follows:
 - (a) Each Party shall be responsible for those portions of the 911 System for which it has control, including any necessary maintenance to each Party's portion of the 911 System.

(b) Qwest shall be responsible for maintaining the E-911 database.

50.1.8.3 If a third party is the primary service provider to a government agency, CLEC shall negotiate separately with such third party with regard to the provision of 911 service to the agency. All relations between such third party and CLEC are totally separate from this Agreement and Qwest makes no representations on behalf of the third party.

50.1.8.4 If CLEC or an Affiliate is the primary service provider to a government agency, CLEC and Qwest shall negotiate the specific provisions necessary for providing 911 service to the agency and shall include such provisions in an amendment to this Agreement.

50.1.8.5 Interconnection and database access shall be priced as specified in Attachment 1 to this Agreement or at any rate charged to other interconnected carriers, whichever is lower.

50.1.8.6 CLEC will separately negotiate with each county regarding the collection and reimbursement to the county of applicable Customer taxes for 911 service.

50.1.8.7 Qwest shall comply with established, competitively neutral intervals for installation of facilities, including any collocation facilities, diversity requirements, etc.

50.1.8.8 In a resale situation, where it may be appropriate for Qwest to update the ALI database, Qwest shall update such database with CLEC data in an interval no less than is experienced by Qwest Customers, or than for other carriers, whichever is faster, at no additional cost.

50.1.9 The following are Basic 911 and E911 Database Requirements:

50.1.9.1 The ALI database shall be managed by Qwest, but is the property of Qwest and any participating telephone company and CLEC for those records provided by the company.

50.1.9.2 Qwest, or its agent, will be responsible for maintaining the E-911 Data Base. Qwest, or its agent, will provide a copy of the Master Street Address Guide ("MSAG"), and periodic updates, to CLEC.

50.1.9.3 Copies of the MSAG shall be provided within twenty-one (21) calendar days from the time requested and shall be provided on diskette, magnetic tape, or in a format suitable for use with desktop computers.

50.1.9.4 CLEC assumes all responsibility for the accuracy of the data that CLEC provides to Qwest for MSAG preparation and E-911 Database operation.

Part A

- 50.1.9.5 CLEC shall be solely responsible for providing CLEC database records to Qwest for inclusion in Qwest's ALI database on a timely basis.
- 50.1.9.6 CLEC will provide end user data to the Qwest ALI database that are Master Street Address Guide (MSAG) valid.
- 50.1.9.7 CLEC will update its end user records provided to the Qwest ALI database to agree with the 911 MSAG standards for its service areas.
- 50.1.9.8 Qwest and CLEC shall arrange for the automated input and periodic updating of the E911 database information related to CLEC end users for resold lines in accordance with Section 10.1 of Attachment 2 to this Agreement. CLEC may request, through the BFR process, similar arrangements for CLEC customers served on a non-resale basis. Qwest will furnish CLEC any variations to NENA recommendations required for ALI database input. The cost of magnetic tape transfer shall be borne by CLEC.
- 50.1.9.9 Qwest and CLEC shall arrange for the automated input and periodic updating of the E911 database information related to CLEC end users. For resold services, Qwest shall work cooperatively with CLEC to ensure the accuracy of the data transfer by verifying it against the Master Street Address Guide (MSAG). For CLEC's customers served by unbundled Network Elements or through CLEC's own facilities, CLEC shall ensure the accuracy of its 911 data by verifying it against the MSAG.
- 50.1.9.10 CLEC shall assign an E911 database coordinator charged with the responsibility of forwarding CLEC end user ALI record information to Qwest or via a third-party entity, charged with the responsibility of ALI record transfer. CLEC assumes all responsibility for the accuracy of the data that CLEC provides to Qwest.
- 50.1.9.11 The Parties shall maintain a single point of contact to coordinate all E911 activities under this Agreement.
- 50.1.9.12 For resold services, CLEC shall provide information on new Customers to Qwest within one (1) Business Day of the order completion. Qwest shall update the database within two (2) Business Days of receiving the data from CLEC. If Qwest detects an error in the CLEC provided data, the data shall be returned to CLEC within two (2) Business Days from when it was provided to Qwest. CLEC shall respond to requests from Qwest to make corrections to database record errors by uploading corrected records within two (2) business days. Manual entry shall be allowed only in the event that the system is not functioning properly. CLEC may request, through the BFR process, similar services from Qwest for their customers who are served on a non-resale basis.

Part A

- 50.1.9.13 The Parties will cooperate to implement the adoption of a Carrier Code (NENA standard five-character field) on all ALI records received from CLEC, when those standards, NENA-02-00N, are adopted by the industry standards process. Qwest will furnish CLEC any variations from NENA recommendations required for ALI database input. The Carrier Code will be used to identify the carrier of record in INP configurations.
- 50.1.9.14 CLEC will provide end user data to the Qwest ALI database utilizing NENA-02-001 Recommended Formats For Data Exchange, and Recommended Standard For Street Thoroughfare Abbreviations and Protocols For Data Exchange and Data Quality utilizing NENA Recommended Formats for Data Exchange document dated June 1993.
- 50.1.9.15 Qwest shall identify which ALI databases cover which states, counties or parts thereof, and identify and communicate a point of contact for each.
- 50.1.9.16 Qwest will provide CLEC with the identification of the Qwest 911 controlling office that serves each geographic area served by CLEC.
- 50.1.9.17 Qwest shall provide to CLEC, for CLEC Customers, E911/911 call routing to the appropriate Public Safety Answering Point ("PSAP") for resold lines. Qwest shall provide and validate CLEC Customer information to the PSAP in the same fashion as it does for its own Customers. Qwest shall use its service order process to update and maintain, on the same schedule that it uses for its end users, the CLEC Customer service information in the ALI/DMS used to support E911/911 services. CLEC may request, through the BFR process, similar services from Qwest for their customers who are served on a non-resale basis.
- 50.1.9.18 CLEC exchanges to be included in Qwest's E911 Database will be indicated via written notice and will not require an amendment to this Agreement.

50.1.10 The following are Basic 911 and E911 Network Requirements:

- 50.1.10.1 Qwest, at CLEC option, shall provide a minimum of two (2) E911 trunks per jurisdictional area, or that quantity which will maintain P.01 transmission grade of service, or the level of service provided by Qwest to itself, whichever is the higher grade of service. These trunks will be dedicated to routing 911 calls from CLEC switch to a Qwest E911 tandem.
- 50.1.10.2 Qwest shall provide CLEC a data link to the ALI/DMS database or permit CLEC to provide its own data link to the ALI/DMS database.

Part A

Qwest shall provide error reports from the ALI/DMS database to CLEC immediately after CLEC inputs information into the ALI/DMS database. Alternately, CLEC may utilize Qwest or a third party entity to enter Customer information into the database on a demand basis, and validate Customer information on a demand basis.

- 50.1.10.3 Qwest shall provide the selective routing of E911 calls received from CLEC switching office. This includes the ability to receive the ANI of the CLEC Customer, selectively route the call to the appropriate PSAP, and forward the Customer's ANI to the PSAP. Qwest shall provide CLEC with the appropriate CLLI codes and specifications regarding the tandem serving area associated addresses and meet points in the network.
- 50.1.10.4 Copies of E911 Tandem Boundary Maps shall be available to CLEC. Each map shows the areas served by that E911 tandem. The map provides CLEC the information necessary to set up its network to route E911 callers to the correct E911 tandem.
- 50.1.10.5 CLEC shall ensure that its switch provides an eight-digit ANI consisting of an information digit and the seven-digit exchange code. CLEC shall also ensure that its switch provides the line number of the calling station. In the event of a change in industry standards, the Parties shall cooperate to incorporate the changed standards in their respective networks.
- 50.1.10.6 Each ALI discrepancy report shall be jointly researched by Qwest and CLEC. Corrective action shall be taken immediately by the responsible party.
- 50.1.10.7 Technical specifications for E911 network interface are available through U S WEST's technical publication 77338. Technical specifications for database loading and maintenance are available through the third party database manager -- SCC.
- 50.1.10.8 Qwest shall begin restoration of E911 and/or E911 trunking facilities immediately upon notification of failure or outage. Qwest must provide priority restoration of trunks or networks outages on the same terms/conditions it provides itself and without the imposition of TelecommunicationsService Priority (TSP).
- 50.1.10.9 Qwest shall identify any special operator-assisted calling requirements to support 911.
- 50.1.10.10 Trunking shall be arranged to minimize the likelihood of central office isolation due to cable cuts or other equipment failures. There will be an alternate means of transmitting a 911 call to a PSAP in the event of failures.

- 50.1.10.11 Circuits shall have interoffice, loop and carrier system diversity when such diversity can be achieved using existing facilities. Circuits will be divided as equally as possible across available carrier systems. Diversity will be maintained or upgraded to utilize the highest level of diversity available in the network.
- 50.1.10.12 Equipment and circuits used for 911 shall be monitored at all times. Monitoring of circuits shall be done to the individual circuit level. Monitoring shall be conducted by Qwest for trunks between the tandem and all associated PSAPs.
- 50.1.10.13 Repair service shall begin immediately upon receipt of a report of a malfunction. Repair service includes testing and diagnostic service from a remote location, dispatch of or in-person visit(s) of personnel. Technicians will be dispatched without delay.
- 50.1.10.14 All 911 trunks must adhere to the Americans with Disabilities Act requirements.
- 50.1.10.15 The Parties will cooperate in the routing of 911 traffic in those instances where the ALI/ANI information is not available on a particular 911 call.
- 50.1.10.16 CLEC is responsible for network management of its network components in compliance with the Network Reliability Council Recommendations and meeting the network standard of Qwest for the 911 call delivery.

50.1.11 Basic 911 and E911 Additional Requirements

- 50.1.11.1 All CLEC lines that have been ported via INP shall reach the correct PSAP when 911 is dialed. Qwest shall send both the ported number and the CLEC number (if both are received from CLEC). The PSAP attendant shall see both numbers where the PSAP is using a standard ALI display screen and the PSAP extracts both numbers from the data that is sent.
- 50.1.11.2 Qwest shall work with the appropriate government agency to provide CLEC the ten-digit POTS number of each PSAP which sub-tends each Qwest E911 Tandem to which CLEC is interconnected.
- 50.1.11.3 Qwest will provide CLEC with the ten-digit telephone numbers of each PSAP agency, for which Qwest provides the 911 function, to be used by CLEC operators for handling emergency calls in those instances where the CLEC Customer dials "O" instead of "911."
- 50.1.11.4 CLEC will provide Qwest with the ten-digit telephone numbers of each PSAP agency, for which CLEC provides the 911 function, to be used

by Qwest operators for handling emergency calls in those instances where the Qwest Customer dials "O" instead of "911."

- 50.1.11.5 Qwest shall notify CLEC forty-eight (48) hours in advance of any scheduled testing or maintenance affecting CLEC 911 service, and provide notification as soon as possible of any unscheduled outage affecting CLEC 911 service.
- 50.1.11.6 CLEC shall be responsible for reporting all errors, defects and malfunctions to Qwest. Qwest shall provide CLEC with the point of contact for reporting errors, defects, and malfunctions in the service and shall also provide escalation contacts.
- 50.1.11.7 CLEC may enter into subcontracts with third parties, including CLEC affiliates, for the performance of any of CLEC duties and obligations stated herein.
- 50.1.11.8 Qwest shall provide sufficient planning information regarding anticipated moves to SS7 signaling for the next twelve (12) months.
- 50.1.11.9 Qwest shall provide notification of any pending tandem moves, NPA splits, or scheduled maintenance outages, with enough time to react.
- 50.1.11.10 Qwest shall provide "reverse ALI" inquiries by public safety entities, consistent with Qwest's practices and procedures.
- 50.1.11.11 Qwest shall manage NPA splits by populating the ALI database with the appropriate new NPA codes, consistent with Qwest's practices and procedures for resold services.
- 50.1.11.12 Qwest must provide the ability for CLEC to update 911 database with end user information for lines that have been ported via INP or NP.
- 50.1.11.13 The data in the ALI database shall be managed by Qwest but is the property of Qwest and all participating telephone companies.

50.1.12 Performance Criteria. E-911 Database accuracy shall be as set forth below:

- 50.1.12.1 Accuracy of ALI (Automatic Location Identification) data submitted by CLEC to Qwest will be measured jointly by the PSAPs and Qwest. All such reports shall be forwarded to CLEC by Qwest and will indicate incidents when incorrect or no ALI data is displayed. A report regarding any inaccuracy shall be prepared by Qwest.
- 50.1.12.2 Each discrepancy report will be jointly researched by Qwest and CLEC. Corrective action will be taken immediately by the responsible party.

50.1.12.3 Each party will be responsible for the accuracy of the Customer records it provides.

50.2 Directory Assistance Service

50.2.1 Qwest shall provide for the routing of directory assistance calls (including, but not limited to, 411, 555-1212, NPA-555-1212) dialed by CLEC Customers directly to either the CLEC Directory Assistance service platform or Qwest Directory Assistance service platform as specified by CLEC.

50.2.2 CLEC Customers shall be provided the capability by Qwest to dial the same telephone numbers for access to CLEC Directory Assistance that Qwest Customers use to access Qwest Directory Assistance.

50.2.3 Qwest shall provide Directory Assistance functions and services to CLEC for its Customers as described below until, at CLEC's discretion, Qwest routes calls to the CLEC Directory Assistance Services platform.

50.2.3.1 Qwest agrees to provide CLEC Customers with the same Directory Assistance service available to Qwest Customers.

50.2.3.2 Qwest shall notify CLEC in advance of any changes or enhancements to its Directory Assistance service, and shall make available such service enhancements on a non-discriminatory basis to CLEC.

50.2.3.3 Qwest shall provide Directory Assistance to CLEC Customers in accordance with Qwest's internal operating procedures and standards, which shall, at a minimum, comply with accepted professional and industry standards.

50.2.3.4 Qwest shall provide CLEC with the same level of support for the provisioning of Directory Assistance as Qwest provides itself.

50.2.3.5 Service levels shall comply, at a minimum, with Commission requirements for Directory Assistance.

50.2.3.6 Qwest agrees to maintain an adequate operator work force based on a review and analysis of actual call attempts and abandonment rate.

50.2.3.7 Subject to the applicable provisions of the applicable collective Qwest bargaining agreements, CLEC shall be permitted to participate in all call monitoring activities available to Qwest and to remote call monitor as customarily practiced by the outsource customers of call centers.³⁵

³⁵ Arizona Bench Order, May 29, 1997 Hearing, pp. 1613-1614.

50.2.3.8 Qwest shall provide the following minimum Directory Assistance capabilities to CLEC Customers:

- (a) A maximum of two (2) Customer listings and/or addresses or Qwest parity per CLEC Customer request.
- (b) Name and address to CLEC Customers upon request, except for unlisted numbers, in the same states where such information is provided to Qwest Customers.
- (c) For CLEC customers who are served exclusively through resold Qwest retail services, CLEC may resell Qwest's Directory Assistance call completion services to the extent Qwest offers call Directory Assistance completion to its own end users. For CLEC customers who are served from a CLEC switch, CLEC may request Directory Assistance call completion services through the BFR process. Such BFR process shall address the identification of the CLEC end user at the Qwest Directory Assistance platform for purposes of routing and billing of intraLATA and interLATA toll calls.
- (d) The Qwest mechanized interface with the Qwest subscriber listing database is not available for CLEC as of the Effective Date of this Agreement. When the mechanized interface is available, Qwest will populate the Directory Assistance Database in the same manner and in the same time frame as for Qwest Customers.
- (e) Any information provided by a Directory Assistance Automatic Response Unit (ARU) shall be repeated the same number of times for CLEC Customers as for Qwest Customers.
- (f) When a CLEC Customer served on a resale or unbundled switching basis requests a Qwest directory assistance operator to provide instant credit on a directory assistance call, the Qwest directory assistance operator shall inform the CLEC Customer to call an 800 number for CLEC Customer service to request a credit. The accurate identification of CLEC as the customer's local service provider by the Qwest directory assistance operator requires the use of separate CLEC trunks to the Directory Assistance Platform.

50.2.3.9 For resold lines and unbundled switching, Qwest shall provide data regarding billable events as requested by CLEC.

50.2.3.10 Qwest agrees to (a) provide to CLEC operators, on line access to Qwest's directory assistance database equivalent to the access provided to Qwest operators; (b) allow CLEC or a CLEC designated

operator bureau to license Qwest's subscriber listings database on terms and conditions equivalent to the terms and conditions upon which Qwest utilizes such databases; and (c) in conjunction with branded or unbranded directory assistance services pursuant to Section 8 of this Part A, provide caller-optional directory assistance call completion service which is comparable in every way to the directory assistance call completion service Qwest makes available to its own users. CLEC may, at its option, request Qwest not to provide call completion services to CLEC.

- 50.2.3.11 In addition to charges for directory assistance, when call completion for an intraLATA toll call is requested, the applicable charge for the completion of such intraLATA toll call will apply.

50.3 Operator Services

- 50.3.1 Qwest shall provide, for the routing of local Operator Services calls (including, but not limited to, 0+, 0-) dialed by CLEC Customers directly to either the CLEC operator service platform or Qwest operator service platform as specified by CLEC.

- 50.3.2 CLEC Customers shall be provided the capability by Qwest to dial the same telephone numbers to access CLEC operator service that Qwest Customers dial to access Qwest operator service.

- 50.3.3 Qwest shall provide Operator Services to CLEC as described below until, at CLEC's discretion, Qwest routes calls to the CLEC local Operator Services platform.

- 50.3.3.1 Qwest agrees to provide CLEC Customers the same Operator Services available to Qwest Customers. Qwest shall make available its service enhancements on a non-discriminatory basis.

- 50.3.3.2 Qwest shall provide the following minimum Operator Service capabilities to CLEC Customers:

- (a) Qwest shall complete 0+ and 0- dialed local calls, including O-Coin, Automatic Coin Telephone Service (ACTS) and the completion of coin calls, the collection of coins, and the provision of coin rates.
- (b) Qwest shall complete 0+ intraLATA and, when offered, interLATA toll calls. The Parties will cooperate to develop industry standards to include the end user's PIC in operator services signaling and the development of associated routing procedures.
- (c) Qwest shall complete calls for CLEC's Customers that are billed to calling cards and other commercial cards on the same basis

as provided to Qwest own customers and CLEC shall designate to Qwest the acceptable types of special billing.

- (d) Qwest shall complete person-to-person calls.
- (e) Qwest shall complete collect calls.
- (f) Qwest shall provide the capability for callers to bill to a third party and complete such calls.
- (g) Qwest shall complete station-to-station calls.
- (h) Qwest shall process emergency calls.
- (i) Qwest shall process Busy Line Verify and Busy Line Interrupt requests.
- (j) Qwest shall process emergency call trace in accordance with its normal and customary procedures.
- (k) Qwest shall process operator-assisted directory assistance calls.
- (l) Qwest operators shall provide CLEC Customers with long distance rate quotes to the extent Qwest provides such rate quotes to its own end users. Based on technology available as of the Effective Date of this Agreement, the provision of rate quotes to CLEC Customers requires a separate CLEC trunk group to the Qwest operator services platform to identify the caller as a CLEC Customer.
- (m) Qwest operators shall provide CLEC Customers with time and charges to the extent Qwest provides such time and charges to its own end users. Based on technology available as of the Effective Date of this Agreement, the provision of time and charges to CLEC Customers requires a separate CLEC trunk group to the Qwest operator services platform to identify the caller as a CLEC Customer.
- (n) Qwest shall route 0- traffic to a "live" operator team.
- (o)³⁶ **At the election of CLEC, when a CLEC Customer requests a Qwest operator to provide instant credit on an Operator Services call, the Qwest operator shall either inform the CLEC Customer that a credit will be granted, or shall inform the CLEC Customer to call a toll free number for CLEC**

³⁶ Procedural Order, July 14, 1997, page 11-12.

Customer service to request a credit. Qwest shall provide one (1) toll free number for business Customers and another for residential Customers.

- (i) **For resold Operator Services, Qwest shall credit the CLEC account in accordance with the same credit procedures which are applied to Qwest's own retail customers;**
 - (ii) **For Operator Services offered as an unbundled Network Element, Qwest shall credit the CLEC account for 50 percent of the charges, except where a greater credit is required by the Commission's service quality rules and regulations.**
 - (p) Qwest shall provide caller assistance for the disabled in the same manner as provided to Qwest Customers.
 - (q) When available to Qwest end users, Qwest shall provide operator-assisted conference calling to CLEC.
- 50.3.3 Qwest shall exercise at least the same level of fraud control in providing Operator Service to CLEC that Qwest provides for its own operator service, where the CLEC fraud control data is in Qwest's LIDB database.
- 50.3.4 Qwest shall perform billed number screening when handling collect, third party, and calling card calls, both for station to station and person to person call types.
- 50.3.5 Subject to the applicable provisions of the applicable collective Qwest bargaining agreements, CLEC shall be permitted to participate in all call monitoring activities available to Qwest and to remote call monitor as customarily practiced by the outsource customers of call centers.³⁷**
- 50.3.6 Qwest shall direct Customer account and other similar inquiries to the Customer service center designated by CLEC.
- 50.3.7 Qwest shall provide an electronic feed of Customer call records in "EMR" format to CLEC in accordance with the time schedule mutually agreed between the Parties.
- 50.3.8 Qwest shall update the Line Information Data Base ("LIDB") for CLEC Customers. Additionally, Qwest must provide access to LIDB for validation of collect, third party billed, and LEC card billed calls.
- 50.3.9 Where INP is deployed and when a BLV/BLI request for a ported number is directed to a Qwest operator and the query is not successful (i.e., the request yields an

³⁷ Arizona Bench Order, May 29, 1997 Hearing, p. 1617.

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abnormal result), CLEC may request, through the BFR process, that the operator confirm whether the number has been ported and direct the request to the appropriate operator.

50.3.10 Qwest shall allow CLEC to order provisioning of Telephone Line Number ("TLN") calling cards and BNS,, in its LIDB, for ported numbers, as specified by CLEC. Qwest shall continue to allow CLEC access to its LIDB.

50.3.11 Toll and Assistance ("T/A") refers to functions Customers associate with the "O" operator. Subject to availability and capacity, access may be provided via operator services trunks purchased from Qwest or provided by CLEC via collocation arrangements to route calls to CLEC's platform.

50.3.12 Automated Branding - ability to announce the carrier's name to the Customer during the introduction of the call.

50.3.13 Interconnection to the Qwest Toll and Assistance Operator Services from an end office to Qwest T/A is technically feasible at least at three (3) distinct points on the trunk side of the switch. The first connection point is an operator services trunk connected directly to the T/A host switch. The second connection point is an operator services trunk connected directly to a remote T/A switch. The third connection point is an operator services trunk connected to a remote access tandem with operator concentration capabilities.

50.3.14 All trunk interconnections will be digital.

50.3.15 The technical requirements of operator services type trunks and the circuits to connect the operator positions to the host are covered in the Operator Services Switching Generic Requirements ("OSSGR") Bellcore Document number FR-NWT-000271.

50.3.16 Busy Line Verify and Interrupt

50.3.16.1 At the request of CLEC operators or Customers, Qwest operators will perform Busy Line Verify ("BLV") and/or Busy Line Interrupt ("BLI") operations where such capacity exists.

50.3.16.2 When possible and where consistent with the service Qwest provides to its own Customers and/or end users, Qwest shall engineer its BLV/BLI facilities to accommodate the anticipated volume of BLV/BLI requests during the busy hour. CLEC may, from time to time, provide its anticipated volume of BLV/BLI requests to Qwest. In those instances when failures occur to significant portions of the BLV/BLI systems and databases and those systems and databases become unavailable, Qwest shall promptly Inform CLEC.

50.3.16.3 BLV is performed when one Party's Customer requests assistance from the other Party's operator or operator bureau to determine if the

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called line is in use; provided, however, that the operator bureau will not complete the call for the Customer initiating the BLV inquiry. Only one (1) BLV attempt will be made per Customer operator bureau call, and a charge shall apply whether or not the called party releases the line.

- 50.3.16.4 BLI is performed when one Party's Customer requests assistance from the other Party's operator bureau to interrupt a telephone call in progress after BLV has occurred. The operator bureau will interrupt the busy line and inform the called party that there is a call waiting. The operator bureau will only interrupt the call and will not complete the telephone call of the Customer initiating the BLI request. The operator bureau will make only one (1) BLI attempt per Customer operator telephone call and the applicable charge applies whether or not the called party releases the line.
- 50.3.16.5 Each Party's operator bureau shall accept BLV and BLI inquiries from the operator bureau of the other Party in order to allow transparent provision of BLV/ BLI traffic between the Parties' networks.
- 50.3.16.6 Each Party shall route BLV/BLI Traffic inquiries over direct trunks between the Parties' respective operator bureaus. Unless otherwise mutually agreed, the Parties shall configure BLV/BLI trunks over the Interconnection architecture defined in Attachment 4 to this Agreement.

50.4 Directory Assistance and Listings Service Requests

50.4.1 These requirements pertain to Qwest's Directory Assistance and Listings Service Request process that enables CLEC to (a) submit CLEC Customer information for inclusion in Qwest Directory Assistance and Directory Listings databases; (b) submit CLEC Customer information for inclusion in published directories; and (c) provide CLEC Customer delivery address information to enable Qwest to fulfill directory distribution obligations.

50.4.1.1 [Intentionally left blank for numbering consistency]

50.4.1.2 Qwest will accept the following Directory Listing Migration Orders from CLEC, valid under all access methods, including, but not limited to, Resale, Unbundled Network Elements and Facilities-Based, and will process the orders in a mechanized format:

- (a) Migrate with no Changes: Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing. Transfer ownership and billing for listings to CLEC.
- (b) Migrate with Additions: Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing.

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Incorporate the specified additional listings order. Transfer ownership and billing for the listings to CLEC.

- (c) Migrate with Deletions: Maintain all directory listings for the Customer in both Directory Assistance and Directory Listing. Delete the specified listings from the listing order. Transfer ownership and billing for the listings to CLEC.

50.4.1.3 The Directory Listings Migration Options should not be tied to migration options specified for a related service order (if any) such that a service order specified as migration with changes may be submitted along with a directory listing order specified as migration with no changes.

50.4.1.4 Qwest shall enable CLEC to electronically transmit multi-line listing orders.

50.4.1.5 Qwest agrees to work cooperatively with CLEC to define specifications for, and implement a daily summary report of, Directory Service Requests. The summary information will include, but is not limited to, the following information:

- (a) White page listings text and format (name, address, phone, title, designation, extra line requirements)
- (b) Listing Instruction codes

50.4.1.6 To ensure accurate order processing, Qwest shall provide to CLEC the following information, with updates within one (1) Business Day of change and via electronic exchange:

- (a) A matrix of NXX to central office
- (b) Geographical maps, if available, of Qwest service area
- (c) A description of calling areas covered by each directory, including, but not limited to, maps of calling areas and matrices depicting calling privileges within and between calling areas
- (d) Listing format rules
- (e) Listing alphabetizing rules
- (f) Standard abbreviations acceptable for use in listings and addresses
- (g) Titles and designations

50.4.1.7 Based on changes submitted by CLEC, Qwest shall update and maintain Directory Assistance and Directory Listings data for CLEC Customers who:

- (a) Disconnect Service
- (b) Change carrier
- (c) Install Service
- (d) Change any service which affects Directory Assistance information
- (e) Specify Non-Solicitation
- (f) Are Non-Published, Non-Listed, or Listed

50.4.1.8 Qwest shall not charge for storage of CLEC Customer information in the Directory Assistance and Directory Listing systems.

50.4.1.9 CLEC shall not charge for storage of Qwest Customer information in the Directory Assistance and Directory Listing systems.

50.5 Directory Assistance Data

50.5.1 This Section refers to the residential, business, and government Customer records used by Qwest to create and maintain databases for the provision of live or automated operator assisted Directory Assistance. Directory Assistance data is information that enables telephone exchange carriers to swiftly and accurately respond to requests for directory information, including, but not limited to, name, address and phone numbers. Under the provisions of the Act and the FCC's Interconnection Order, Qwest shall provide unbundled and non-discriminatory access to the residential, business and government Customer records used by Qwest to create and maintain databases for the provision of live or automated operator assisted Directory Assistance. **CLEC may combine this element with any other Network Element for the provision of any Telecommunications Service.**³⁸

50.5.2 Qwest shall provide an initial load of Customer records and Customer list information to CLEC, in a mutually-agreed-to format, via electronic transfer, within thirty (30) calendar days of the Effective Date of this Agreement. The initial load shall include all data resident in the Qwest Databases and/or systems used by Qwest for housing Directory Assistance data and/or Customer listing data. In addition, the initial load shall be current as of the prior Business Day on which the initial load is provided.

50.5.3 Qwest shall provide CLEC daily updates to the Customer records and Customer list information in a mutually-agreed-to format via electronic transfer.

³⁸ MCI Order, p.11, Issue 14; AT&T Order, p. 13, Issue 25.

- 50.5.4 Qwest shall provide the ability for CLEC to electronically query the Qwest Directory Assistance Database and listings Database in a manner at least consistent with and equal to that which Qwest provides to itself or any other Person.
- 50.5.5 Qwest shall provide CLEC a complete list of ILECs, CLECs, and independent telephone companies that provided data contained in the database.
- 50.5.6 On a daily basis, Qwest shall provide updates (end user and mass) to the listing information via electronic data transfer. Updates shall be current as of one (1) Business Day prior to the date provided to CLEC.
- 50.5.7 Qwest shall provide CLEC access to Directory Assistance support databases. For example, CLEC requires access to use restriction information including, but not limited to, call completion.
- 50.5.8 Directory Assistance data shall specify whether the Customer is a residential, business, or government Customer.
- 50.5.9 Directory Assistance data shall be provided on the same terms, conditions, and rates that Qwest provides such data to itself or other third parties.
- 50.5.10 Qwest shall provide complete refresh of the Directory Assistance data upon request by CLEC.
- 50.5.11 Qwest and CLEC will cooperate in the designation of a location at which the data will be provided.

51. Unused Transmission Media³⁹

51.1 Definitions

- 51.1.1 Unused Transmission Media is physical inter-office transmission media (e.g., optical fiber, copper twisted pairs, coaxial cable) which have no lightwave or electronic transmission equipment terminated to such media to operationalize transmission capabilities.
- 51.1.2 **Dark fiber is excess fiber optic cable which has been placed in a network and is not currently being lit by electronics from any carrier.** Dark Fiber, one type of Unused Transmission Media, is unused strands of optical fiber. Dark Fiber also includes strands of optical fiber which may or may not have lightwave repeater (regenerator or optical amplifier) equipment interspliced, but which has no line terminating facilities terminated to such strands. Unused Transmission Media also includes unused wavelengths within a fiber strand for purposes of coarse or dense wavelength division multiplexed (WDM) applications. Typical single wavelength transmission involves propagation of optical signals at single wavelengths (1.3 or

³⁹ All bolded language in this Section is included per MCI Order, pp. 8-9 at Issue 9c and AT&T Order Issue 22.

1.55 micron wavelengths). In WDM applications, a WDM device is used to combine optical signals at different wavelengths on to a single fiber strand. The combined signal is then transported over the fiber strand. For coarse WDM applications, one (1) signal each at 1.3 micron and 1.55 micron wavelength are combined. For dense WDM applications, many signals in the vicinity of 1.3 micron wavelength and/or 1.55 micron wavelength are combined.

51.2 While Qwest is not required to provide Unused Transmission Media, other than Dark Fiber,⁴⁰ CLEC may, subject to the agreement of Qwest, lease copper twisted pairs, coaxial cable or other Unused Transmission Media.

51.3 Requirements

51.3.1 Subject to Section 51.2 above, Qwest shall make available Unused Transmission Media to CLEC under a lease agreement or other arrangement.

51.3.2 Qwest shall provide a single point of contact for negotiating all Unused Transmission Media use arrangements.

51.3.3 CLEC may test the quality of the Unused Transmission Media to confirm its usability and performance specifications.

51.3.4 Where Unused Transmission Media is required to be offered or is agreed to be offered by Qwest, Qwest shall provide to CLEC information regarding the location, availability and performance of Unused Transmission Media within ten (10) Business Days for a records based answer and twenty (20) Business Days for a field based answer, after receiving a request from CLEC ("Request"). Within such time period, Qwest shall send written or electronic confirmation or any other method of notification agreed to by the Parties of availability of the Unused Transmission Media ("Confirmation").

51.3.5 Where Unused Transmission Media is required to be offered or is agreed to be offered by Qwest, Qwest shall make Unused Transmission Media available for CLEC's use in accordance with the terms of this Section 51 within twenty (20) Business Days or a reasonable time frame consistent with industry standards after it receives written acceptance from CLEC that the Unused Transmission Media is wanted for use by CLEC. Splicing of CLEC fiber may be performed at the same points that are available for Qwest splices.

51.4 Requirements Specific to Dark Fiber

51.4.1 CLEC may test Dark Fiber leased from Qwest using CLEC or CLEC designated personnel subject to Section 51.2. Qwest shall provide appropriate interfaces to allow testing of Dark Fiber. Qwest shall provide an excess cable length of twenty-five (25) feet minimum, where available, for fiber in underground conduit. Qwest

⁴⁰ MCI Order, pp. 8-9 at Issue 9c and AT&T Order Issue 22.

shall provide splicing of CLEC fiber to Qwest Dark Fiber under normal circumstances (e.g., no construction) in metropolitan areas within seventeen (17) calendar days of CLEC's request, and within thirty (30) calendar days of a request in a non-metropolitan area. CLEC may request expedited splicing, which shall be subject to available Qwest resources.

- 51.4.2 For WDM applications, Qwest shall provide to CLEC an interface to an existing WDM device or allow CLEC to install its own WDM device (where sufficient system loss margins exist or where CLEC provides the necessary loss compensation) to multiplex the traffic at different wavelengths. This applies to both the transmit and receive ends of the Dark Fiber.
- 51.5 Qwest may not reserve future capacity of its Dark Fiber for its own use, with the exception of maintenance or emergency spare. Maintenance and emergency spare also will be for the benefit of any CLEC which has leased dark fiber from Qwest. Fiber which Qwest has included as part of its local service rate base, and upon which it receives a rate of return, but which is used for other than local service will be subject to reclaim by CLECs in support of their provisioning of local service.⁴¹
- 51.6 Portions of the bandwidth of the fiber may be sectioned and CLEC may share the bandwidth with Qwest and other CLECs.
- 51.7 The fiber should be used efficiently and to a reasonable level of capacity. CLEC's Request to lease Dark Fiber must establish that another Network Element of comparable expense cannot satisfy CLEC's needs. At its discretion, CLEC may share fiber capacity with other parties, and such shared-use may justify CLEC's need for the fiber.
- 51.8 Qwest may revoke the lease or other use arrangement and reclaim its fiber or bandwidth with twelve (12) months notice to CLEC, if Qwest can establish that the fiber is necessary to meet its bandwidth requirements or those of another requesting CLEC, provided that the original CLEC's transportation is provided for by alternative means and at comparable prices and quality. The conversion to the alternative means shall be at the expense of the new user of the Dark Fiber, whether that be Qwest or another CLEC. One of the alternatives means to be considered by Qwest will be the sharing of bandwidth.
- 51.9 If CLEC obtains access to Qwest's Dark Fiber, CLEC shall make its Dark Fiber available to Qwest on a comparable and reciprocal basis. This Section 51.9 shall not take effect until CLECs (other than wireless CLECs) operating within Qwest's Arizona service territory provide service to at least 200,000 access lines.

⁴¹ Procedural Order, July 14, 1997 at pages 12-13.

52. Service Standards⁴²

Qwest will provide all Local Resale, Ancillary Functions, Network Elements or Combinations in accordance with service standards, measurements, and performance requirements that are expressly specified in this Agreement and Attachment 5 hereto. In cases where such performance standards are not expressly specified, Qwest will provide all Local Resale, Ancillary Functions, Network Elements or Combinations in accordance with performance standards which are at least equal to the level of performance standards and/or quality of service that Qwest provides to itself, its Affiliates, to other CLECs, or other quality of service requirements imposed by the Commission, whichever is higher, in providing Local Resale, Ancillary Functions, Network Elements or Combinations to itself, to its end-users or to its Affiliates. If CLEC requests a higher level of service than that provided by Qwest to itself, CLEC shall make the request pursuant to the BFR process.

52.1 Definitions

Pending adoption of service standards rules by the Commission, the following interim provisions shall apply.

52.1.1 "Specified Performance Commitment" means the commitment by Qwest to meet the Performance Criteria for any Specified Activity during the Specified Review Period. The Specified Review Period shall be the same period as Qwest provides itself for existing Performance Criteria and shall be ninety (90) days for new Performance Criteria. The standard of performance for each of the measurements of performance in Arizona shall be the quality of service which Qwest provides in Arizona to either itself, its ten largest end user Customers in the aggregate, independent LECs in the aggregate, other CLECs in the aggregate, or other quality of service requirements imposed by the Commission, whichever is highest. Neither performance penalties nor credits will be imposed for failure to comply with service standards.

52.1.2 "Specified Activity" includes, but is not limited to, the following activities:

- (a) Installation Activities -- apply to resold services, unbundled loops, unbundled switching, and interim number portability:**
 - (i) Installation Intervals Offered (measured from application date to original due date);**
 - (ii) Installation Commitments Met;**
 - (iii) Installation Reports within seven (7) days (percent of reports per total of new, to or change orders).**

⁴² Section added per MCI Order, p. 17 at Issue 28 and AT&T Order, p. 20 at Issues 36, 73, and 74.

- (b) **Repair Activities -- apply to resold service, unbundled loops, unbundled switching, and interim number portability:**
 - (i) **Out of Service Cleared in Less than Twenty-four (24) Hours (percent of total out of service reports);**
 - (ii) **Report Rate per 100 Access Lines;**
 - (iii) **Repair Commitments Met;**
 - (iv) **Out of Service and Service Affecting Cleared in Less than Forty-eight (48) Hours;**
 - (v) **Repair Repeat Reports within Thirty (30) Days (Percent of Repeats per 100 Access Lines).**
- (c) **Trunking Activities -- includes interconnection trunks:**
 - (i) **Defects per One Million Calls (Dedicated Facilities/Trunkside only).**

52.1.3 "Performance Criteria" means, with respect to a Specified Review Period (i.e., a calendar month or quarter), the performance by Qwest for the specified activities for CLEC will meet or exceed the average performance by Qwest for each resold or unbundled Network element the total universe of for each Specified Activity.

52.2 Failure to Meet the Performance Criteria

If, during a Specified Review Period, Qwest fails to meet the Performance Criteria, Qwest will use its best efforts to meet the Performance Criteria for the next Specified Review Period. If Qwest fails to meet the Performance Criteria for two (2) consecutive periods, the Parties agree, in good faith, to attempt to resolve such issues through negotiation or non-binding arbitration. This paragraph shall not be construed to waive either Party's right to seek legal or regulatory intervention as provided by state or federal law. CLEC may seek regulatory or other legal relief including requests for specific performance of Qwest's obligations under this Agreement.

52.3 Limitations

Qwest's failure to meet or exceed any of the Performance Criteria cannot be as a result, directly or indirectly, of a Delaying Event. A "Delaying Event" means (a) a failure by CLEC to perform any of its obligations set forth in this Agreement, (b) any delay, act or failure to act by a Customer, agent of subcontractor of CLEC, or (c) any force majeure event. If a Delaying Event prevents Qwest from performing a Specified Activity, then such Specified Activity shall be excluded from the calculation of Qwest's compliance with the Performance Criteria.

52.4 Records

Qwest shall maintain complete and accurate records, for the Specified Review Period, of its performance under this Agreement for each Specified Activity and its compliance with the Performance Criteria. Qwest shall provide to CLEC such records in a self-reporting format. The Parties agree that such records shall be deemed *Proprietary Information*.

52.5 Cost Recovery

Qwest reserves the right to attempt to recover the costs, if any, associated with the creation of the above reports and standards through a future proceeding before a regulatory body.

52.6 CLEC and Qwest acknowledge and understand that the performance and quality of service standards outlined in this Section may be supplanted or supplemented by the generic proceeding to be held by the Commission to determine permanent quality of service measurements/liquidated damages.⁴³

53. Entire Agreement

- 53.1 This Agreement shall include the Attachments, Appendices and other documents referenced herein all of which are hereby incorporated by reference, and constitutes the entire agreement between the Parties and supersedes all prior oral or written agreements, representations, statements, negotiations, understandings, proposals and undertakings with respect to the subject matter hereof.
- 53.2 If a provision contained in any Qwest tariff conflicts with any provision of this Agreement, the provision of this Agreement shall control, unless otherwise ordered by the FCC or the Commission.

54. Reservation of Rights

- 54.1 The Parties acknowledge that the terms of this Agreement were established pursuant to an order of the Commission. Any or all of the terms of this Agreement may be altered or abrogated by a successful challenge to this Agreement (or the order approving this Agreement) as permitted by applicable law. By signing this Agreement, neither Party waives its right to pursue such a challenge.
- 54.2 The Parties enter into this Agreement without prejudice to any position they may have taken previously, or may take in the future in any legislative, regulatory, or other public forum addressing any matters, including matters related to the types of arrangements prescribed by this Agreement.

⁴³ MCIm Order, p. 17 at Issue 28 and AT&T Order, p. 20 at Issues 36, 73, & 74.

Part A

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their respective duly authorized representatives.

Internet Commerce and Communications

Charles R. Lyon
Signature
Charles R. Lyon
Name Printed/Typed
GM/JJ
Title
2/05/01
Date

Qwest Corporation

Patrick D. Holton
*Signature
Patrick D. Holton
Name Printed/Typed
Director Wholesale Markets
Title
02/05/01
Date

*Signed as ordered by the arbitrator/commission in Docket Nos. U-2428-96-417, E-1051-96-417, U-3175-96-479, and E-1051-96-479. Signature does not indicate agreement with all aspects of the arbitrator's decision, nor does it waive any of Qwest's right to seek judicial review of all or part of the agreement, or to reform the agreement as the result of successful judicial review.

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RATES and CHARGES

1. General Principles

- 1.1 All rates provided under this Agreement shall remain in effect for the term of this Agreement unless they are not in accordance with all applicable provisions of the Act, the rules and regulations of the FCC, or the Commission's rules and regulations.
- 1.2 Except as otherwise specified in this Agreement, as approved or ordered by the Commission, or as agreed to by the Parties through good faith negotiations, nothing in this Agreement shall prevent a Party through the dispute resolution process described in this Agreement from seeking to recover the costs and expenses, if any, it may incur in (a) complying with and implementing its obligations under this Agreement, the Act, and the rules, regulations and orders of the FCC and the Commission, and (b) the development, modification, technical installation and maintenance of any systems or other infrastructure which it requires to comply with and to continue complying with its responsibilities and obligations under this Agreement.

2. Resale Rates and Charges

- 2.1¹ On an interim basis and subject to true up following permanent pricing proceedings, Qwest is permitted to charge a Customer Transfer Charge ("CTC") for resale customers switching to CLEC. CLEC shall be permitted to demonstrate what its own cost will be upon termination of a resale customer, so that amount may be discounted from the CTC payable to Qwest.
- 2.2² A resale discount rate of seventeen percent (17%) is adopted as an interim wholesale discount for those services subject to resale under this Agreement. Such interim wholesale discount is subject to true up upon establishment of permanent rates.
- 2.3 If the resold services are purchased pursuant to tariffs and the tariff rates change, charges billed to CLEC for such services will be based upon the new tariff rates less the applicable wholesale discount as agreed to herein. The new rate will be effective upon the tariff effective date.
- 2.4 A Subscriber Line Charge (SLC) will continue to be paid by CLEC without discount for each local exchange line resold under this Agreement. All federal and state rules and regulations associated with SLC or as found in the applicable tariffs also apply.
- 2.5 CLEC will pay to Qwest the PIC change charge without discount associated with CLEC end user changes of interexchange or intraLATA carriers.

¹ MCIIm Order, p. 24 at Issue 41.

² MCIIm Order, p. 27 and AT&T Order at Issue 32.

- 2.6 CLEC agrees to pay Qwest at the wholesale discount rate when its end user activates any services or features that are billed on a per use or per activation basis (e.g., continuous redial, last call return, call back calling, call trace, etc.). Qwest shall provide CLEC with detailed billing information per applicable OBF standards unless otherwise agreed to by the Parties as necessary to permit CLEC to bill its end users such charges.
- 2.7 [Intentionally left blank for numbering consistency]
- 2.8 Nonrecurring charges will be billed as approved by the Commission.
- 2.9 [Intentionally left blank for numbering consistency]
- 2.10 **Service quality credits will not be applicable as additional resale discounts.³**
- 2.11 Resale prices shall be wholesale rates determined on the basis of retail rates charged to subscribers for the Telecommunications Service requested, excluding the portion thereof attributable to any marketing, billing, collection and other costs that will be avoided by Qwest, as specified in the Act, by the FCC and/or the Commission. **Qwest shall be obligated to offer its volume and term discount service plans to CLEC provided that CLEC complies with the volume and term requirements contained therein. If selected by CLEC, an appropriate wholesale discount shall also be applied to such plans. With the exception of the preceding, CLEC shall not be required to agree to volume or term commitments as a condition for obtaining Local Service.⁴**
- 2.12 Qwest shall bill CLEC and CLEC is responsible for all applicable charges for Resale Services. CLEC shall be responsible for all charges associated with services that CLEC resells to an end user.

3. Construction and Implementation Costs

- 3.1 **Qwest may assess CLEC up-front, nonrecurring charges for construction costs associated with a service only if Qwest assesses its own end users such charges for similar construction and also demonstrates to the Commission that it is customary industry practice to charge end users for similar costs. If a tariff exists, such charges are deemed to be a customary industry practice. Qwest shall not double recover nonrecurring construction charges. If another CLEC or Qwest receives a benefit from the construction or other activity for which CLEC is charged, CLEC is entitled to recover contribution from the CLEC, or, if applicable, Qwest as a beneficiary, for a share of the costs.⁵**
- 3.2 [Intentionally left blank for numbering consistency]

³ MCIm Order, pp. 17-18 at Issue 28 and AT&T Order at Issue 36.

⁴ AT&T Order, p. 19 at Issue 33.

⁵ MCIm Order, pp. 23-24 at Issue 41 and AT&T Order at Issue 39.

- 3.3 [Intentionally left blank for numbering consistency]
- 3.4 A quote for the CLEC portion of a specific job will be provided to CLEC. The quote will be in writing and will be binding for ninety (90) days after the issue date. When accepted, CLEC will be billed the quoted price and construction will commence after receipt of payment. If CLEC chooses not to have Qwest construct the facilities, Qwest reserves the right to bill CLEC for the expense incurred for producing the engineered job design.
- 3.5 CLEC shall make payment of fifty percent (50%) of the nonrecurring charges and fees upon acceptance of the quotation with the remainder due upon completion of the construction. In the event that CLEC disputes the amount of Qwest's proposed construction costs, CLEC shall deposit fifty percent (50%) of the quoted construction costs into an interest bearing escrow account prior to the commencement of construction. The remainder of the quoted construction costs shall be deposited into the escrow account upon completion of the construction. Upon resolution of the dispute, the escrow agent shall distribute amounts in the account in accordance with the resolution of such dispute, and any interest that has accrued with respect to amounts in the account shall be distributed proportionately to the Parties. The pendency of any such dispute shall not affect the obligation of Qwest to complete the requested construction.
- 3.6 Notwithstanding any provision contained in this Agreement to the contrary, within ninety (90) days of the Effective Date of this Agreement, the Parties shall negotiate a pricing schedule for collocation enclosure buildouts.⁶

4. Unbundled Loops - Conditioning Charge

- 4.1 For loops that need conditioning, as requested by CLEC, to ensure the necessary transmission standard, conditioning charges may apply so long as such charges are assessed to Qwest's similarly situated customers. If Qwest normally charges its customers an up-front fee, it may require CLEC to pay an up-front fee. If the fee for conditioning is built into the monthly cost for its customers, however, the conditioning costs shall be considered as part of the forward looking economic cost of the upgraded loop.⁷

5. Transport and Termination - Interim Prices

- 5.1⁸ Pursuant to A.A.C. R14-2-1304, the Parties will utilize bill and keep as a reciprocal compensation mechanism for a period of twenty-four (24) months from the time of the Commission's approval of the first interconnection agreement between Qwest and any CLEC (December 18, 1996). Unless permanent rates have been established,

⁶ Procedural Order, July 14, 1997, page 24.

⁷ MCI Order, pp. 27-28 and AT&T Order, p. 37.

⁸ MCI Order, p. 28 and AT&T Order at Issue 88.

upon termination of bill and keep, interim rates shall apply. Either Party may seek an earlier termination of the bill and keep mechanism if it is able to prove to the Commission, based on six (6) consecutive months of its traffic data, that traffic terminated by CLEC and Qwest is out of balance by more than ten (10) percent. Reciprocal compensation shall comply with the Recommended Order on Consolidated Cost and Pricing Arbitration, to be trued up upon approval of that Decision by the Commission.⁹

5.1.1 At such time as bill and keep is terminated, and permanent rates are established by the Commission, a true-up for the regulatory lag may be ordered by the Commission.

5.2¹⁰ CLEC shall receive fair compensation for the use of its switch equivalent to that of Qwest's switch beginning from the date CLEC enters an agreement granting access to the facilities of CLEC's long distance affiliate(s). Until that time, CLEC's switch shall be billed at the rates equivalent to that of a Qwest end office switch.

6. Number Portability

6.1 CLEC and Qwest shall provide remote call forwarding functionality, or other INP capabilities, to each other at no charge, in accordance with the provisions of the FCC's First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116 ("FCC Number Portability Order").

6.2 The costs incurred by CLEC and Qwest of providing INP shall be recovered through a broad-based cost recovery mechanism, as described in the FCC Number Portability Order. Costs shall be assessed in an annual surcharge based upon each carrier's number of ported telephone numbers relative to the total number of active telephone numbers in the local service area, as discussed by the FCC in the FCC Number Portability Order, at paragraph 16.

6.3¹¹ In respect to distribution of terminating charges in the context of INP, such charges shall be distributed in a manner consistent with meet-point billing arrangements. Accordingly, there shall be no requirement that all of the terminating interstate or intrastate access charges paid by IXCs on calls forwarded as a result of number portability measures be paid to either CLEC or Qwest. CLEC and Qwest shall share in the access revenues received for a ported call. If Qwest or CLEC is unable to identify the particular IXC carrying a forwarded call for purposes of assessing access charges, the forwarding carrier shall provide the terminating carrier with the necessary information to permit the terminating carrier to issue a bill. The Parties shall work together to incorporate the results of the FCC Access Reform Order when final.

⁹ Procedural Order, July 14, 1997, page 16.

¹⁰ MCI Order, p. 26.

¹¹ AT&T Order, p. 28 at Issue 50.

- 6.4 CLEC may request Qwest to provide CLEC call detail records identifying each IXC which are sufficient to allow CLEC to render bills to IXCs for calls IXCs place to ported numbers in the Qwest network which Qwest forwards to CLEC for termination. To the extent Qwest is unable to provide billing detail information within a reasonable time frame, the Parties may agree on an interim method to share access revenues pursuant to a mutually agreed upon surrogate approach.

7. Network Elements

- 7.1¹² Qwest may receive compensation for electronic interfaces as an initial access fee for its expenditures at such time as the completion of the gateway interfaces are effected. The reimbursement for such expenditures shall be apportioned among all end users of the gateway interfaces in Arizona, including Qwest. Qwest and CLEC acknowledge that the specific cost-sharing mechanism for electronic interfaces shall be determined by a generic proceeding held by the Commission for this purpose.
- 7.2 [Intentionally left blank for numbering consistency]
- 7.3¹³ The expense of rebranding operator services and directory assistance, if requested by CLEC, shall be included as a forward looking economic cost, such cost to be resolved in the future proceeding to be conducted by the Commission as it considers cost studies.
- 7.4¹⁴ Until rates are established by the Commission pursuant to a rate determination proceeding based upon cost studies, interim rates shall apply. At such time as said rates are established, a true-up will occur.¹⁵

8. Rate Schedule

- 8.1 Interim rates for interconnection, unbundled Network Elements, Ancillary Services, and Reciprocal Compensation are provided in Schedule 1 to this Attachment 1.

¹² AT&T Order, p. 26 at Issue 45.

¹³ AT&T Order, p. 18 at Issue 30.

¹⁴ AT&T Order, p. 37.

¹⁵ AT&T Order, p. 3 and MCI Order, p.3.

Schedule 1 of Attachment 1

ARIZONA QWEST and CLEC PRICE LIST

NOTE: Rates set forth in this Attachment reflect the final Arizona Cost Docket Rates, Docket Number U-3021-96-448, effective January 30, 1998

UNBUNDLED NETWORK ELEMENTS

Unbundled Loop

Network Interface Device, New Customer, Recurring (Note *1)	\$0.58
Network Interface Device, New Customer, Nonrecurring (Note *2)	\$30.00
Loop Distribution (Note *5 & *12)	\$15.33
Not in Cost Docket – Leave As Is -	
(Loop Concentrator	BFR
(Loop Feeder	BFR
Unbundled 2 Wire Loop, Recurring (Note *5)	\$21.98
Unbundled 4 Wire Loop, Recurring (Note *5)	\$22.90
Residence Nonrecurring (2-Wire)	\$40.92
Business Nonrecurring (2-Wire)	\$45.92
Cable Unloading and Bridge Tap Removal, One-Time Charge	\$114.80
Extension Technology, Recurring	\$6.75

Switching (Note *3)

Usage Per Minute	\$0.0028
Per Port, Recurring	\$1.61
Per Port, Nonrecurring (Note *6)	\$42.58

Entrance Facility (Note *3)

DS1, Electrical, Recurring	\$89.42
DS3, Electrical, Recurring	\$357.16
DS1, Electrical, Nonrecurring (First/Subsequent)	\$256.87
DS3, Electrical, Nonrecurring	\$256.87

Direct and Dedicated Transport (Note *3)

DS0 Dedicated, Recurring		\$5.05
	<u>Fixed</u>	<u>Per Mile</u>
DS1 - 0 Miles	None	None
DS1 - Over 0 to 8	\$35.98	\$0.65
DS1 - Over 8 to 25	\$35.99	\$0.94
DS1 - Over 25 to 50	\$36.00	\$1.75
DS1 - Over 50	\$36.00	\$1.59

DS3 - 0 Miles	None	None
DS3 - Over 0 to 8	\$243.17	\$13.32
DS3 - Over 8 to 25	\$246.15	\$15.90
DS3 - Over 25 to 50	\$250.66	\$22.91
DS3 - Over 50	\$249.26	\$22.49

UNBUNDLED NETWORK ELEMENTS

Multiplexing, per arrangement

DS3 to DS1, Recurring	\$196.85
DS3 to DS1, Nonrecurring	\$164.00

Common Transport/Tandem Transmission, Per Minute, Per Leg (Note *3)	\$0.00088
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Tandem Switching, Per Minute of Use (Note *3)	\$0.00140
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Signaling (Note 1) (Note 7, Note *4, Norw*11)

Entrance Facility

DS1, Electrical, Recurring	\$89.42
DS3, Electrical, Recurring	\$357.16
DS1, Electrical, Nonrecurring	\$560.88
DS3, Electrical, Nonrecurring	\$0.00

Direct Link Transport

Not in Cost Docket - Leave As Is -

	<u>Fixed</u>	<u>Per Mile</u>
(DS0 - 0 Miles	None	None
(DS0 - Over 0 to 8	\$9.38	\$0.04
(DS0 - Over 8 to 25	\$9.38	\$0.05
(DS0 - Over 25 to 50	\$9.39	\$0.06
(DS0 - Over 50	\$9.39	\$0.05

DS1 - 0 Miles	None	None
DS1 - Over 0 to 8	\$35.98	\$0.65
DS1 - Over 8 to 25	\$35.99	\$0.94
DS1 - Over 25 to 50	\$36.00	\$1.75
DS1 - Over 50	\$36.00	\$1.59

DS3 - 0 Miles	None	None
DS3 - Over 0 to 8	\$243.17	\$13.32
DS3 - Over 8 to 25	\$246.15	\$15.90
DS3 - Over 25 to 50	\$250.66	\$22.91
DS3 - Over 50	\$249.26	\$22.49

Multiplexing

DS1 to DS0, Recurring	\$200.08
DS3 to DS1, Recurring	\$196.85
DS1 to DS0, Nonrecurring	\$0.00
DS3 to DS1, Nonrecurring	\$0.00

CCS Link -- First Link, Nonrecurring	\$464.94
CCS Link -- Each additional Link, Nonrecurring	\$147.60

STP Port -- Per Message , Recurring	\$0.00005
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Signaling Link

First Link, Recurring (DS0)	\$24.85
Additional Link, Recurring (DS0)	\$24.85

SCP/Databases -- Per Message	\$0.00100
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ANCILLARY SERVICES

Directory Assistance

Price per Call -- Facilities-Based Providers	\$0.28
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Listings

Primary Listings, Directory Assistance, White & Yellow Pages	No Charge
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E911

LEC and CLECs recover costs from PSAP	No Charge
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Assignment of Numbers

Assignments per industry guidelines	No Charge
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Busy Line Verification

Per Call	\$0.72
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Busy Line Interrupt

Per Call	\$0.87
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Interim Number Portability

Service Establishment, Per Route, Per Switch, Nonrecurring	\$20.65
Service Establishment, Per Ported Number, Nonrecurring	\$4.47
Service Establishment, Additional and Consecutive Numbers	\$3.32
Per Number Ported, Nonrecurring	

PHYSICAL AND VIRTUAL COLLOCATION**Common Elements**

Quote Preparation Fee, Nonrecurring (Note *8)	\$1,381.54
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Cable Splicing

Per Setup, Nonrecurring	\$375.40
Per Fiber Spliced, Nonrecurring	\$15.79

48 Volt Power, Per Ampere, Recurring, Per Month	\$12.89
--	---------

48 Volt Power Cable

20 Ampere Capacity - Recurring	\$0.21
40 Ampere Capacity - Recurring	\$0.29
60 Ampere Capacity - Recurring	\$0.35
20 Ampere Capacity - Nonrecurring	\$59.14
40 Ampere Capacity - Nonrecurring	\$80.69
60 Ampere Capacity - Nonrecurring	\$95.34

Equipment Bay, Per Shelf Rack Space,	\$6.41
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Recurring

Inspector per 1/2 Hour, Regular	\$24.49
Inspector per 1/2 Hour, After Hours	\$36.24
Training per 1/2 Hour, Regular	\$23.95

PHYSICAL AND VIRTUAL COLLOCATION
(Note 2)

Common Elements

Engineering per 1/2 Hour, Regular	\$24.55
Engineering per 1/2 Hour, After Hours	\$35.25
Installation per 1/2 Hour, Regular	\$23.73
Installation per 1/2 Hour, After Hours	\$33.20
Maintenance per 1/2 Hour, Regular	\$22.20
Maintenance per 1/2 Hour, After Hours	\$31.57
EICT Channel Terminations	
2-wire DS0 EICT, Recurring	\$0.44
4-wire DS0 EICT, Recurring	\$0.86
DS1 EICT, Recurring	\$4.28
DS3 EICT, Recurring	\$14.98
2-wire DS0 EICT, Nonrecurring	\$383.30
4-wire DS0 EICT, Nonrecurring	\$383.30
DS1 EICT, Nonrecurring	\$256.87
DS3 EICT, Nonrecurring	\$269.78
EICT Regeneration	
DS1 EICT, Regeneration, Recurring	\$6.30
DS3 EICT, Regeneration, Recurring	\$41.32
DS1 EICT, Regeneration, Nonrecurring	\$0.00
DS3 EICT, Regeneration, Nonrecurring	\$0.00

Element Group 1

Entrance Facility – 2 fibers, Recurring	\$1.52
Entrance Facility – 2 fibers, Nonrecurring	\$1,184.74

Element Group 2

Entrance Enclosure:	
Manhole - Per Month Per Manhole	\$13.81
Handhold - Per Month Per Handhold	\$7.61
Conduit & Interduct fm Entrance Enclosure to Cable Vault, Per Foot/Month	\$0.21
Core Drill, Per Core, Nonrecurring	\$181.57
Riser from Cable Vault to Customer Designated Equipment, Per Foot/Month	\$0.24
Fiber Optic Cable (24 Fiber Increment), Per Foot/Month	\$0.03
Fiber Placement in conduit and riser, Per Foot – Nonrecurring	\$0.83

Copper Cable 25 Pair, Per Month	\$0.006
Copper Cable Splicing - Per Splice – Nonrecurring	\$45.64

Copper Cable Placement in Conduit and Riser - Per Foot – Nonrecurring	\$0.83
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Coax Cable RG59 - Per Foot Per Month	\$0.10
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AC Power Per WATT, Per Month	\$0.03
Humidification Per Leased Physical Space	\$28.03

Cage/Hard Wall Enclosure	ICB
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Rent (w/ Maintenance) - per square foot Zone 1, Recurring	\$2.75
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Rent (w/ Maintenance) - per square foot Zone 2, Recurring	\$2.26
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Rent (w/ Maintenance) - per square foot Zone 3, Recurring	\$2.06
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RESALE

Customer Transfer Charge

Business	\$5.00
Residence	\$5.00
ISDN	\$5.00

Resale Discount

Residential	12%
All Other Services	18%

Note

1 When purchasing signaling links, CLEC will pay the appropriate Entrance Facility, Direct Link Transport, and Multiplexing price, plus the Signaling Link and CCS Link Price.

2 When purchasing Collocation, CLEC will pay the listed price for elements in Element Group 1 and Element Group 2.

*Notes: Docket No. U-3021-96-448 et. al.

*1 Applicable where CLEC terminates its loop to a USWC NID.

*2 Applicable only to new customers, new premise.

*3 For companies that qualify for Bill and Keep, this charge will not apply in the event of Reciprocal Compensation. This Charge will be assessed upon the contract provisions.

*4 Signaling Elements are taken from Hatfield with exceptions of DS1 and DS3 because Hatfield does not calculate these services.

*5 Company proposing to use BFR has to overcome rebuttable assumption that Hatfield prices are appropriate. Applies to recurring charge only. BFR will be used for ordering, provisioning, including any additional equipment and NRCs.

*6 This non-recurring charge does not apply in the event unbundled local switching is ordered with an unbundled loop. If Ordered through Switching, only one NR Charge Applies.

*7 The USWC and CLEC rate structures differ. To establish rates, each party's rate structure has been retained, and the proposed rate halved, in accordance with the Arbitrator's order.

*8 The QPF is credited to the payment for enclosure buildout, if priced on an ICB basis.

*9 When purchasing Collocation, CLEC will pay the listed price for elements in Element Group 1 and Element Group 2.

*10 PL: Competitive Private Line Transport Service Administrative Guidelines.

*11 If ordered Concurrent with the CCS Link, only one NR Charge Applies.

*12 This includes the price of the NID. If a NID is not needed, the price is \$14.74.

*13 There will be no nonrecurring charge for an expanded interconnection channel termination when such facility is ordered in conjunction with an unbundled loop.

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RESALE

1. Description

- 1.1¹ CLEC may resell to any and all classes of end-users Telecommunications Services obtained from Qwest under this Agreement, except for Centrex and Lifeline Assistance/Link-Up (or similar) services, which CLEC may only resell to those subscribers who are eligible for such services. Qwest will not prohibit, nor impose unreasonable or discriminatory conditions or limitations on the resale of its Telecommunications Services. CLEC may not resell residential service to business customers, and business service may not be resold to residential customers. The foregoing shall permit the resale of Telecommunications Services to another Reseller.
- 1.2² Qwest will also make the following services available for resale: residence basic exchange, Centrex Plus, Operator Services, Directory Assistance, Optional Calling Plans, Volume Discount Plans, Discounted Feature Packages, Private Line Transport, negotiated contract arrangements, Business Basic Exchange, PBX Trunks, Frame Relay Service, ISDN, listings, features, intraLATA toll, AIN Services and WATS. This list of services is neither all inclusive nor exclusive.
- 1.3 At the request of CLEC, and pursuant to the requirements of the Act, and FCC rules and state regulations, Qwest shall make available to CLEC for resale any Telecommunications Services that Qwest currently provides or may offer hereafter, including, but not limited to, **Telecommunications Services offered through contract service arrangements, special arrangements, discount plans and promotions of more than ninety (90) days duration.** Resale discounts may vary from the standard resale discount, subject to the approval of the Commission. Qwest shall also provide Service Functions, as agreed to in this Attachment 2. The Telecommunications Services and Service Functions provided by Qwest to CLEC pursuant to this Attachment 2 are collectively referred to as "Local Resale".
- 1.4 This Section 1 describes several services which Qwest shall make available to CLEC for resale pursuant to this Agreement. This description of services is neither all inclusive nor exclusive. Except as may be noted elsewhere in this Agreement, all services or offerings of Qwest which are to be offered for resale pursuant to the Act are subject to the terms herein, even though they are not specifically enumerated or described.
- 1.5³ **Voice mail and inside wire are not available for purchase at the wholesale or discount rate; provided, however, that nothing in this Agreement shall prevent CLEC from requesting voice mail and inside wire at the retail rates for resale.**

¹ MCI Order, p. 13 at Issue 21 and AT&T Order, p. 16 at Issue 29.

² MCI Order, p. 13 at Issue 21 and AT&T Order, p. 16 at Issue 29.

³ MCI Order, p. 12 at Issue 21 and AT&T Order, pp. 14-15 at Issue 27.

1.5.1 Voice Mail

Qwest shall make available the SMDI-E ("Station Message Desk Interface-Enhanced"), where available, or SMDI (Station Message Desk Interface), where SMDI-E is not available, feature capability allowing for Voice Mail Services. Qwest shall make available, where available, the MWI (Message Waiting Indicator) stutter dialtone and message waiting light feature capabilities. Qwest shall make available CF-B/DA (Call Forward on Busy/Don't Answer), CF/B (Call Forward on Busy), and CF/DA (Call Forward Don't Answer) feature capabilities allowing for Voice Mail services.

1.6 Grandfathered Services

Qwest shall offer for resale to CLEC all grandfathered services. For purposes of this Agreement, a grandfathered service is a service that Qwest no longer offers to new subscribers or a class of new subscribers. CLEC shall be notified of any Qwest request for the termination of service and/or its grandfathering filed with the Commission or Qwest's intent to grandfather/withdraw a service at least thirty (30) calendar days prior to the effective date of such grandfathering or intended termination. The form of notification may be either in written or electronic form.

1.7 N11 Service

CLEC shall have the right to resell any N11 service, including, but not limited to, 411 and 911 services.

1.8 Promotions

Promotions of ninety (90) days or less need not be made available to CLEC at the wholesale discount rate.⁴

- 1.9 The specific business process requirements and systems interface requirements are set forth in Attachments 5 and 6.

2. General Terms and Conditions for Resale

- 2.1 **Primary Local Exchange Carrier Selection.** Qwest shall apply the principles set forth in Section 64.1100 of the FCC Rules, 47 C.F.R. § 64.1100, as implemented, to the process for end-user selection of a primary local exchange carrier. In accordance with the customer authorization process described elsewhere in this Agreement, Qwest shall not require notification from the customer, another carrier, or another entity, in order to process a CLEC order for local service for a customer.

⁴ MCIIm Order, p. 12 at Issue 21.

- 2.2 Except where otherwise provided, CLEC, or CLEC's agent, shall act as the single point of contact for its end users' service needs, including, without limitation, sales, service design, order taking, provision, change orders, training, maintenance, trouble reports, repair, post-sale servicing, billing, collection and inquiry. CLEC shall inform its end users that they are customers of CLEC for resold services. CLEC's end users who inadvertently contact Qwest with questions regarding their CLEC service will be instructed to contact CLEC. Qwest end users who inadvertently contact CLEC with questions regarding their Qwest service will be instructed to contact Qwest. Nothing in this Agreement shall be deemed to prohibit either Party from discussing its products and services with customers of the other Party who solicit such information or who are directly contacted by a Party.

3. Basic Service Requirements

3.1 Call Types

- 3.1.1 Qwest shall provide the following call types, features and functions to CLEC and its end users with no loss of feature or functionality: (a) dial tone and ringing; (b) capability for either dial pulse or touch tone; (c) flat and measured services; (d) speech recognition as available with other custom calling and CLASS features; (e) same extended area service free calling area; (f) 1 + intraLATA toll calling; (g) access to interLATA toll calling; (h) access to international calling; (i) lines as well as trunks (DID, DOD); (j) analog and digital private line - all speeds; (k) off-premises extensions; (l) Centrex; and (m) ISDN.
- 3.2 Qwest will provide access for CLEC and all its end user customers to all call types, including, but not limited to, 500, 700, 800, 900, exchanges and dial around services (10XXX).
- 3.3 Qwest shall impose no restrictions on customer's calling (e.g., there should not be a 750 minute limit on flat rate calling).
- 3.4 Qwest will provide pre-subscription services for intraLATA and interLATA toll services in accordance with currently accepted methods and procedures.

3.5 Features Requirements

- 3.5.1 Qwest will provide CLEC the ability to suspend and restore customer service, including vacation suspension service, at the direction of CLEC.
- 3.5.2 End Office Features. Qwest will provide to CLEC the same end office features available to Qwest's end users, including, but not limited to, CLASS features, Custom Calling features, and AIN features.
- 3.5.3 Call Blocking Features. Qwest will provide to CLEC the same call blocking features as are available to Qwest's own Customers.

- 3.6 Upon request, Qwest shall provide CLEC a list, in an agreed upon format by central office, of all the Telecommunications Services, features and functions offered by Qwest within sixty (60) days after the Effective Date of this Agreement and shall provide updates to such lists as further described in Attachment 5. Qwest shall also provide an electronic access method for CLEC to ascertain the service availability of a particular USOC in a given central office.

4. Requirements for Specific Services

4.1 IntraLATA Toll

Qwest will provide CLEC its intraLATA toll service to CLEC for resale where 1+ intraLATA toll presubscription is not available.

4.2 Private Line Services

The following private line services shall be made available without restriction from Qwest: (a) voice grade private line services; (b) off premise extensions; (c) foreign exchange line service; (d) point-to-point and multi-point digital services (e.g., 9.6 kbps-56 kbps; fractional DS-1); (e) DS-1 Services; (f) DS-3 services; (g) OC-3 service (where available); (h) frame relay service; (i) packet switched services; (j) switched digital services; and (k) other private line services as they are made available.

4.3 Centrex Requirements

- 4.3.1 At CLEC's option and as they are available to Qwest's own end users via interstate tariffs and state tariffs, price lists, price schedules, catalogs, or Individual Case Basis, CLEC may purchase a single, any combination, or the entire set of Centrex features, including Centrex Management System (CMS) or its equivalent as described in Attachment 5. The Centrex service provided for resale will meet the requirements set forth in the following provisions of this Section.
- 4.3.2 All service levels and features of Centrex service provided by Qwest for resale by CLEC shall be at parity with levels and features provided to Qwest's own customers or as mutually agreed upon by the Parties.
- 4.3.3 CLEC may aggregate the Centrex local exchange and intraLATA traffic usage of CLEC subscribers to the extent Qwest makes such aggregation available to itself or to its end users, Customers, or Affiliates.
- 4.3.4 CLEC may aggregate multiple CLEC customers on dedicated access facilities.
- 4.3.5 Qwest shall make CMS information available to CLEC at the common block level via an electronic interface, as provided to Qwest's own end users.
- 4.3.6 CLEC may use remote call forwarding in conjunction with Centrex service to provide service to CLEC local service Customers residing outside of the geographic

territory in which Qwest provides local exchange service. However, Qwest is not obligated to provide facilities outside its service territory.

- 4.3.7 CLEC may purchase any and all levels of Centrex service for resale, without restriction on the minimum or maximum number of lines that may be purchased for any one level of service, equivalent to what is offered to Qwest's own end users.
- 4.3.8 Qwest will provide to CLEC the ability to suppress the need for CLEC customers to dial "9" when placing calls outside the Centrex system.
- 4.3.9 Qwest shall make available to CLEC for resale, at no additional charge, intercom calling among all CLEC customers within a common block who utilize resold Centrex service.

4.4 CLASS and Custom Features Requirements

CLEC may purchase a single, any combination, or the entire set of CLASS and custom features and functions, on a customer-specific basis. CLASS features shall include, but not be limited to: caller identification, name and number; call screening; call tracing; and automatic call back on busy (*69). Qwest shall provide to CLEC a list of all such CLASS and custom features and functions within ten (10) days of the Effective Date of this Agreement and shall provide updates to such list when new features and functions become available.

4.5 Customer Financial Assistance Programs

- 4.5.1 Local services provided to low-income subscribers, pursuant to requirements established by the appropriate state regulatory body, include programs such as Lifeline, Voluntary Federal Customer Financial Assistance Program, and Link-Up America ("Voluntary Federal Customer Financial Assistance Programs"). When a Qwest subscriber eligible for the Voluntary Federal Subscriber Financial Assistance Programs or other similar state programs chooses to obtain local service from CLEC, Qwest shall forward information available to Qwest regarding such subscriber's eligibility to participate in such programs to CLEC and in electronic format when available in accordance with the procedures set forth herein.
- 4.5.2 **Qwest shall offer for resale Lifeline and Link-Up Service; provided, however, that CLEC may only resell Lifeline and Link-Up Service to those Customers eligible to receive such services.⁵ Relay services are not available for resale and shall be kept centralized with Qwest.⁶** Qwest will provide information about the certification process for the provisioning of Lifeline, Link-up, and similar services. Qwest will forward to CLEC, in electronic format (when available), information

⁵ AT&T Order, p. 14 at Issue 27.

⁶ AT&T Order, p. 14 at Issue 27.

available to Qwest regarding a subscriber's program eligibility, status and certification when a Qwest subscriber currently on any Qwest telephone assistance program changes service to CLEC as their local exchange carrier. Qwest will cooperate in obtaining any subsidy associated with a subscriber transfer to CLEC.

4.5.2.1 In connection with the transfer of a customer from Qwest to CLEC, Qwest shall provide to CLEC a customer profile, including customer name, billing and residence address, billing telephone number(s), eligibility for Voluntary Federal Customer Financial Assistance Program, and other similar services, and identification of Qwest features and services subscribed to by the customer.⁷

4.6 Discount Plans and Services

- 4.6.1 In accordance with FCC rules and regulations, Qwest shall offer for resale all Discount Plans and Services.
- 4.6.2 CLEC can utilize any volume discounts that Qwest makes available to its end user customers.

4.7 Hospitality Service

Qwest shall provide all blocking, screening, and all other applicable functions available for hospitality lines utilized as such.

4.8 Telephone Line Number Calling Cards. Effective ten (10) Business Days after the date of an end-user's subscription to CLEC service or within twenty-four (24) hours after CLEC has notified Qwest that it has replaced the subscriber's calling card, whichever is earlier, Qwest will terminate its existing telephone line number-based calling cards and deactivate any Qwest-assigned telephone line calling card number subaccount and PIN (including area code) ("TLN") from the LIDB. CLEC may issue a new telephone calling card to such customer, utilizing the same TLN, and CLEC shall have the right to enter such TLN in the LIDB for calling card validation purposes. Qwest will assume responsibility for billing its calling card calls that appear before the card is terminated. Nothing in this section shall prohibit Qwest from terminating calling card service to Qwest customers who have been determined to be a credit risk, according to Qwest's normal business practices.

- 4.8.1 Except as provided above, the Parties will cooperate in the deactivation and activation of calling cards and will make reasonable efforts to minimize the time a customer is without an active calling card.
- 4.8.2 Qwest shall not prohibit CLEC from issuing a new telephone calling card to a CLEC customer utilizing the same TLN and CLEC shall have the right to enter the TLN in the LIDB for calling card verification purposes.

⁷ AT&T Order, p. 14 at Issue 27.

4.8.3 Qwest will provide CLEC the ability to utilize Qwest's LIDB for calling card validation.

4.9 Qwest shall make engineering support available to CLEC for Resale Services on the same basis as it provides such support for Qwest end users. To the extent the cost of such engineering support has been considered an avoided cost in the development of the avoided cost discount, the cost of such engineering support shall be borne by CLEC.

4.10 Payphone Services

Qwest agrees to sell for resale all tariffed PAL services at a appropriate wholesale discount to be determined by the Commission.

4.10.1 Qwest shall offer for resale, at a minimum, the following Coin Line, PAL, and PAL Coinless features:

Billed Number Screening
Ability to "freeze" PIC selection
One (1) bill per line and/or multiple lines per BAN
Point of demarcation at the Network Interface location
Detailed billing showing all 1+ traffic on paper, diskette or electronic format
Touch-tone service
Option for listed or non-listed numbers
Access to 911 service
One (1) directory per line

4.10.2 At a minimum, Qwest shall offer for resale the following Coin Line features:

- Access to all central office intelligence required to perform answer detection, coin collection, coin return, and disconnect
- Answer Detection
- Option to block all 1+ calls to international destinations
- IntraLATA Call Timing
- Option of one-way or two-way service on line
- Flat Rate Service, where available
- Originating line screening
- Qwest central office intelligence for rating and other functions
- Option of measured service, where available
- Ability to block any 1+ service that cannot be rated by the coin circuits/TSPS/OSPS to the extent provided on Qwest coin lines
- Protect against clip on fraud to the extent provided on Qwest coin lines
- Protect against blue box fraud to the extent provided on Qwest coin lines
- Provision of Information Digit 27

4.10.3 At a minimum, Qwest shall offer for resale the following PAL and PAL Coinless features:

- Originating line screening
- Two-way service option
- Flat rate service based on rate groups, where available
- Option of one-way service on the line, where available
- Option of measured service, where available
- Ability to keep existing serving telephone numbers if cutover to CLEC
- CLEC resale line incoming/outgoing screening
- Provision of Information Digit 07
- Provision of International Toll Denial Recognition Tone, when available

4.10.4 At a minimum, Qwest shall offer for resale the following PAL Coin feature:

- Blocking for 1+ international, 10XXXX1 + international, 101XXXX1 + international, 1+900, N11, 976 and option to block all 1-700 and 1-500 calls
- Line side supervision option

4.10.5 At a minimum, Qwest shall offer for resale the following PAL Coinless feature:

- Blocking for 1 + international, 10XXXX1 + international, 101XXXX1 + International, 1+900, N11, 976, and 7 digit local

4.10.7 Qwest shall provide installation intervals to CLEC for ordering, call transfer, billing, and PIC changes in accordance with performance standards that are established by the Commission, pursuant to subsequent agreement between the Parties or as provided to any other Person.

5. Service Functions

5.1 Qwest shall provide CLEC with the information available to Qwest that CLEC will need to certify subscribers who transfer from Qwest as exempt from charges (including taxes), or eligible for reduced charges associated with providing services.

5.2 Qwest shall provide CLEC with appropriate notification of all area transfers with line level detail one hundred twenty (120) days before service transfer, and will also notify CLEC within one hundred twenty (120) days before such change or any LATA boundary changes.

5.3 Qwest will work cooperatively with CLEC in practices and procedures regarding the handling of law enforcement and service annoyance calls.

5.4 Support Functions

5.4.1 Routing to Directory Assistance, Operator and Other Services

5.4.1.1 Qwest shall make available to CLEC the ability to route:

- (a) all Local Directory Assistance calls (411, (NPA) 555-1212) dialed by CLEC Customers directly to the CLEC Directory Assistance Services platform, where technically feasible and consistent with FCC rules; and
- (b) Local Operator Services calls (O+, O-) dialed by CLEC Customers directly to the CLEC Local Operator Services platform, where technically feasible and consistent with FCC rules. Such traffic shall be routed over trunk groups between Qwest end offices and the CLEC Local Operator Services Platform, using standard Operator Services dialing protocols of O+ or O-.

5.4.1.2 All direct routing capabilities described herein shall permit CLEC Customers to dial the same telephone numbers for CLEC Directory Assistance and Local Operator Service as Qwest customers use to access similar services.

6. Security and Law

- 6.1 Qwest will maintain and safeguard all CLEC customer information according to CPNI privacy guidelines.
- 6.2 Qwest and CLEC will work jointly in security matters as they relate to CLEC customers in a resale environment including, but not limited to, harassment and annoyance calls.
- 6.3 Qwest and CLEC will work jointly to support law enforcement agency requirements including, but not limited to, taps, traces and court orders.
- 6.4 Qwest will work jointly with CLEC with respect to prevention and settlement of fraud.
- 6.5 Qwest and CLEC will work jointly to provide access to lines in a hostage situation.

7. Ordering and Maintenance

- 7.1 CLEC shall transmit to Qwest the information necessary for the installation (billing, listing and other information), repair, maintenance and post-installation servicing according to Qwest's standard procedures, as described in the Qwest resale operations guide that will be provided to CLEC. When Qwest's end user or the end user's new service provider discontinues the end user's service in anticipation of moving to another service provider, Qwest will render its closing bill to the end user effective with the disconnection. Should CLEC's end user, a new service provider or CLEC request service be discontinued to the end user, Qwest will issue a bill to CLEC for that portion of the service provided to the CLEC end user. In no event, shall the transition of an end user from Qwest to CLEC cause a disconnection of service other than as specifically provided for in this Agreement. It is understood that CLEC's decision to request a change in class of service (or a conversion to a re-used unbundled loop) at "transition" may involve a few minutes out-of-service. The preceding may be modified by agreement of the Parties.

- 7.2 Qwest will notify CLEC by fax or other processes as agreed to by the Parties, when an end user moves to another service provider.
- 7.3 The new service provider shall be responsible for issuing either a transfer of service or disconnect/new connect order, as appropriate.
- 7.4 The Parties agree that they will work cooperatively to develop the standards and processes applicable to the transfer of such accounts that are in arrears.

8. Changes in Retail Service

- 8.1 **Qwest will notify CLEC of any changes in the terms and conditions under which it offers Telecommunications Services at retail to subscribers who are not telecommunications service providers or carriers, including, but not limited to, the introduction or discontinuance of any features, functions, services or promotions. Such notification shall be through Qwest's filing for Commission approval of such matters.⁸**
- 8.2 Qwest will provide to CLEC advance notice of the availability of new Telecommunication Services in accordance with Section 23.2 of Part A of this Agreement.
- 8.3 In the event Qwest intends to terminate the provisioning of any resold services to CLEC for any reason, CLEC shall be responsible for providing any and all necessary notice to its end users of the termination. In no case shall Qwest be responsible for providing such notice to CLEC's end users. Qwest will provide sufficient written notice to CLEC of Qwest's intent to terminate a resold service so that CLEC may notify its customers or intervene in the proceedings on a timely basis consistent with Commission rules and notice requirements.

9. Customer Authorization Process

- 9.1 Qwest and CLEC will use the existing PIC process as a model, and the same or similar procedures for changes of local providers. For a local carrier change initiated by CLEC or an agent of CLEC to a customer, one of the following four (4) procedures will constitute authorization for the change: (a) Obtain the customer's written authorization (letter of authorization or LOA); (b) Obtain the customer's electronic authorization by use of a toll-free number; (c) Have the customer's oral authorization verified by an independent third party (third party verification); or (d) Send an information package, including a prepaid, returnable postcard, within three (3) days of the customer's request for a local carrier change, and wait fourteen (14) days before submitting the local carrier change to the previous carrier.
- 9.2 It is understood by Qwest and CLEC that these procedures may be superseded or modified by FCC rules or industry standards.

⁸ AT&T Order, p. 22 at Issue 39(a).

- 9.3 Qwest will provide CLEC authorization for a local carrier change that is initiated by a customer call to CLEC. In this case CLEC will: (a) maintain internal records verifying the customer's stated intent to switch carriers; and (b) produce the record in case of a slamming dispute consistent with FCC rules.
- 9.4 Should an end user dispute or a discrepancy arise regarding the authority of CLEC to act on behalf of the end user, CLEC is responsible for providing a written response evidencing its authority to Qwest within five (5) Business Days of receipt of a written request from Qwest describing the basis of the dispute or discrepancy. If there is a conflict between the end user designation or CLEC does not provide a response within five (5) Business Days, Qwest shall honor the designation of the end user. In the event the end user designation is honored by Qwest as described above, then CLEC shall remit a slamming charge, if any, in accordance with Section 258 of the Act and Commission Rules.
- 9.5 Should an end user dispute or a discrepancy arise regarding the authority of Qwest to act on behalf of the end user, Qwest is responsible for providing a written response evidencing its authority to CLEC within five (5) Business Days of receipt of a written request from CLEC describing the basis of the dispute or discrepancy. If there is a conflict between the end user designation or Qwest does not provide a response within five (5) Business Days, CLEC shall honor the designation of the end user. In the event the end user designation is honored by CLEC as described above, then Qwest shall remit a slamming charge, if any, in accordance with Section 258 of the Act and Commission rules.
- 9.6 CLEC shall designate the Primary Interexchange Carrier (PIC) assignments on behalf of its end users for interLATA services and for intraLATA services when intraLATA presubscription is implemented.
- 9.6.1 **Qwest is not required to assign central office codes in a Qwest central office for the exclusive use of CLEC.⁹**
- 9.7 When Customers switch from Qwest to CLEC, or to CLEC from any other service provider, such Customers shall be permitted to retain their current telephone numbers if they so desire and if they do not change their service address to an address served by a different central office. Qwest shall take no action to prevent CLEC Customers from retaining their current telephone numbers.

10. CLEC Responsibilities

- 10.1 CLEC must send to Qwest either (a) complete and accurate end user listing information for Directory Assistance and 911 Emergency Services using processes mutually agreed to by the Parties, or (b) notification of as is migration. CLEC must provide to Qwest accurate end user information to ensure appropriate listings in any databases in which Qwest retains and/or maintains end user information. CLEC assumes liability for the accuracy of

⁹ AT&T Order, p. 30 at Issue 59.

information provided to Qwest. After receiving accurate information from CLEC, Qwest assumes liability for the accuracy of transmission of such information to the database provider (e.g., SCC).

- 10.2 Qwest shall provide CLEC with the capability to assign large quantities (i.e., greater than ten (10)) telephone numbers for multiple line and PBX customers in accordance with Qwest's tariffs and/or its own internal practices.
- 10.3 CLEC will provide a three (3) year non-binding forecast within ninety (90) days of the Effective Date of this Agreement. The forecast shall be updated and provided to Qwest on a quarterly basis. The initial forecast will provide:
- The date service will be offered (by city and/or state)
 - The type and quantity of service(s) which will be offered
 - CLEC's anticipated order volume
 - CLEC's key contact personnel

11. Pricing

The wholesale discount rate charged to CLEC for Local Resale is set forth in Attachment 1 of this Agreement.

12. Deposit

- 12.1 Qwest may require a suitable deposit to be held by Qwest as a guarantee for payment of Qwest's charges for companies which cannot demonstrate sufficient financial integrity based on commercially reasonable standards, which may include a satisfactory credit rating as determined by a recognized credit rating agency reasonably acceptable to Qwest.
- 12.2 When the service is terminated or when CLEC has established satisfactory credit, if required under the terms of the preceding paragraph, the amount of the initial or additional deposit, with any interest due, will, at CLEC's option, be either credited to CLEC's account or refunded. Satisfactory credit for CLEC is defined as **(a) twelve (12) months positive payment history in another capacity with Qwest, such as in the interexchange area; (b) financial standing as outlined in the preceding paragraph above; (c) posting a bond,¹⁰ or (d) twelve (12) consecutive months' service as a reseller without a termination for nonpayment and with no more than one (1) notification of intent to terminate service for nonpayment.** Interest on the deposit shall be accumulated by Qwest at a rate equal to the federal prime rate, as published in the Wall Street Journal from time to time.

¹⁰ AT&T Order, p. 21 at Issue 38.

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UNBUNDLED ACCESS/ELEMENTS

1. Introduction

- 1.1 Qwest shall provide unbundled Network Elements in accordance with this Agreement, the Act, FCC rules and regulations, and state rules, regulations and orders. The price for each Network Element is set forth in Attachment 1 of this Agreement. Except as otherwise set forth in this Attachment, CLEC may order Network Elements as of the Effective Date of this Agreement.
- 1.2 General Terms
 - 1.2.1 Qwest agrees to make available the following unbundled Network Elements which are addressed in more detail in the following sections of this Attachment: (a) local loop, (b) local and tandem switches **(including all vertical switching features provided by such switches)**, (c) interoffice transmission facilities, (d) network interface devices, (e) signaling and call-related database facilities, (f) operations support systems functions, and (g) operator and directory assistance facilities.¹
 - 1.2.2 **Qwest shall offer each Network Element individually and in Combinations with any other Network Element or Network Elements in order to permit CLEC to combine such Network Element or Network Elements obtained from Qwest or with network components provided by itself or by third parties to provide Telecommunications Services to its subscribers. CLEC may purchase unbundled Network Elements individually or in Combinations without restrictions as to how those elements may be rebundled.**²

2. Unbundled Network Elements

- 2.1 Qwest shall offer Network Elements to CLEC on an unbundled basis on rates, terms and conditions that are just, reasonable, and non-discriminatory in accordance with the terms and conditions of this Agreement.
- 2.2 Qwest shall permit CLEC to connect CLEC's facilities or facilities provided to CLEC by third parties with each of Qwest's unbundled Network Elements at any technically feasible point designated by CLEC.
- 2.3 CLEC may use one or more Network Elements to provide any feature, function, capability, or service option such Network Element(s) is capable of providing or any feature, function, capability, or service option described in the technical references identified herein, or as may otherwise be determined by CLEC.

¹ MCI Order, p. 25 and AT&T Order, p. 11 at Issue 18.

² MCI Order, p. 11 at Issue 14 and AT&T Order, p. 13 at Issue 25.

- 2.3.1 CLEC may, at its option, designate any technically feasible method of access to unbundled Network Elements, including access methods currently or previously in use by Qwest.
- 2.4 **CLEC may purchase unbundled Network Elements without restrictions as to how CLEC may rebundle those elements.³**
- 2.5 For each Network Element, Qwest shall provide a demarcation point (e.g., at a Digital Signal Cross Connect, DCS, Light Guide Cross Connect panel or a Main Distribution Frame) and, if necessary, access to the CLEC side of such demarcation point, which CLEC agrees is suitable. Where Qwest provides combined Network Elements at CLEC's direction, however, no demarcation point shall exist between such contiguous Network Elements.
- 2.6 [Intentionally left blank for numbering consistency]
- 2.7 This Attachment describes the initial set of Network Elements which CLEC and Qwest have identified as of the Effective Date of this Agreement:
- Loop
 - Network Interface Device
 - Distribution (subject to the BFR)
 - Local Switching
 - Operator Systems
 - Shared Transport
 - Common Transport
 - Dedicated Transport
 - Signaling Link Transport
 - Signaling Transfer Points
 - Service Control Points/Databases
 - Tandem Switching
 - 911
 - Directory Assistance
- 2.8 CLEC and Qwest agree that the Network Elements identified in this Attachment are not all of the possible Network Elements.
- 2.9 CLEC may identify additional or revised Network Elements as necessary to provide Telecommunications Services to its subscribers, to improve network or service efficiencies or to accommodate changing technologies, customer demand, or other requirements.
- 2.9.1 CLEC will request such Network Elements in accordance with the Bona Fide Request process described in Part A of this Agreement. Additionally, if Qwest provides any Network Element that is not identified in this Agreement to itself, to its own subscribers, to a Qwest Affiliate or to any other Person, Qwest shall make

³ MCI Order, p. 11 at Issue 14 and AT&T Order, p.13 at Issue 25.

available the same Network Element to CLEC on terms and conditions no less favorable to CLEC than those provided to itself or to any other party.

3. Standards for Network Elements

- 3.1 Each Network Element shall be furnished at a service level equal to or better than the requirements set forth in the technical references identified herein for each such Network Element, as well as any performance or other requirements, identified in this Attachment, subject to Sections 1.3.1 and 1.3.2 of Part A of this Agreement.
- 3.2 If one or more of the requirements set forth in this Agreement are in conflict, the Parties agree to resolve such conflict in accordance with the dispute resolution provisions of Part A of this Agreement.
 - 3.2.1 Qwest shall provide to CLEC, upon request, engineering, design, performance and other network data sufficient for CLEC to determine that the requirements of this Section 3 are being met. In the event such data indicates that the requirements set forth herein are not being met, Qwest shall, within ten (10) days, cure any design, performance or other deficiency and provide new data sufficient for CLEC to determine that such deficiencies have been cured.
 - 3.2.2 Qwest agrees to work cooperatively with CLEC to provide Network Elements that will meet CLEC's needs in providing Telecommunications Services to its subscribers.
- 3.3 Unless otherwise requested by CLEC, each Network Element or any Combination thereof and the connections between Network Elements provided by Qwest to CLEC shall be made available to CLEC at any technically feasible point, that is equal to or better than the manner in which Qwest provides such Network Elements, Combinations and connections to itself, its own subscribers, to a Qwest Affiliate or to any other Person.

Description of Unbundled Elements

4. Tandem Switching

Qwest will provide a tandem switching element ("Tandem Switching") on an unbundled basis. The tandem switch element includes the facilities connecting the trunk distribution frames to the switch, and all the functions of the switch itself, including those facilities that establish a temporary transmission path between two (2) other switches. The definition of the tandem switching element also includes the functions centralized in tandems rather than in separate end office switches, such as call recording, the routing of calls to Operator Services, and signaling conversion functions.

4.1 Definition:

Tandem Switching is the function that establishes a communications path between two (2) switching offices through a third switching office (the tandem switch) including, but not limited to, those of CLEC, Qwest, independent telephone companies (ICOs), IXC's and wireless carriers.

4.2 Technical Requirements

- 4.2.1 Tandem Switching provided by Qwest to CLEC shall have the same capabilities or equivalent capabilities as those described in Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, June 1, 1990. The requirements for Tandem Switching include, but are not limited to, the following:
 - 4.2.1.1 Tandem Switching shall provide signaling to establish a tandem connection;
 - 4.2.1.2 Tandem Switching shall provide screening (digit analysis) and routing as designated by CLEC;
 - 4.2.1.3 Where technically feasible, Tandem Switching shall provide recording of all billable events designated by CLEC;
 - 4.2.1.4 Tandem Switching shall allow passing of Advanced Intelligent Network triggers supporting AIN features;
 - 4.2.1.5 Tandem Switching shall provide connectivity to Operator Systems as designated by CLEC;
 - 4.2.1.6 Tandem Switching shall provide access to toll free number portability database where CLEC sends such traffic to a tandem;
 - 4.2.1.7 Tandem Switching shall allow the passing of all functions associated with traffic for all trunk interconnection discussed under the "Network Interconnection" section of this Agreement (e.g., SS7, MF, DTMF, Dial Pulse, PRI-ISDN, DID, and CAMA-ANI (if appropriate for 911));
 - 4.2.1.8 Tandem Switching shall provide connectivity to PSAPs where 911 solutions are deployed and the tandem is used for 911; and
 - 4.2.1.9 Tandem Switching shall provide connectivity to Transit Traffic to and from other carriers.
- 4.2.2 Tandem Switching shall accept connections (including the necessary signaling and trunking interconnections) between end offices, other tandems, IXCs, ICOs, CAPs and CLEC switches.
- 4.2.3 Tandem Switching shall provide local tandeming functionality between two (2) end offices, including two (2) offices belonging to different CLECs (e.g., between a CLEC end office and the end office of another CLEC).
- 4.2.4 Tandem Switching shall preserve CLASS/LASS features and Caller ID as traffic is processed. Additional signaling information and requirements are provided in Section 15 of this Attachment.

- 4.2.5 Tandem Switching shall record billable events and send them to the area billing centers designated by CLEC. Billing requirements are specified in Attachment 5 of this Agreement.
 - 4.2.6 Qwest shall perform routine testing and fault isolation on the underlying switch providing Tandem Switching and all its Interconnections. When requested by CLEC, the results and reports of the testing shall be made immediately available to CLEC.
 - 4.2.7 When requested by CLEC, Qwest shall provide to CLEC for review performance data regarding traffic characteristics or other measurable elements with respect to CLEC traffic.
 - 4.2.8 Tandem Switching shall control congestion using capabilities such as Automatic Congestion Control and Network Routing Overflow. Congestion control provided or imposed on CLEC traffic shall be at parity with controls being provided or imposed on Qwest traffic (e.g., Qwest shall not block CLEC traffic and leave its own traffic unaffected or less affected).
 - 4.2.9 Tandem Switching shall route calls to Qwest or CLEC endpoints or platforms (e.g., Operator Services and PSAPs) on a per call basis as designated by CLEC. Detailed primary and overflow routing plans for all interfaces available within the Qwest switching network shall be mutually agreed to by CLEC and Qwest. Such plans shall meet CLEC requirements for routing calls through the local network.
 - 4.2.10 Tandem Switching shall process originating toll free traffic received from a CLEC local switch.
 - 4.2.11 In support of AIN triggers and features, Tandem Switching shall provide SSP capabilities when these capabilities are not available from the Local Switching Network Element.
 - 4.2.12 The Local Switching and Tandem Switching functions may be combined in an office. If this is done, both Local Switching and Tandem Switching shall provide all of the functionality required of each of those Network Elements in this Agreement.
- 4.3 Interface Requirements
- 4.3.1 Tandem Switching shall provide interconnection to the E911 PSAP where the underlying Tandem is acting as the E911 Tandem.
 - 4.3.2 Tandem Switching shall interconnect, with direct trunks, to all carriers with which Qwest interconnects.
 - 4.3.3 Qwest shall provide all signaling necessary to provide Tandem Switching with no loss of feature functionality.
 - 4.3.4 For applicable call types, Tandem Switching shall interconnect with CLEC's switch, using two-way trunks, for traffic that is transiting via the Qwest network to interLATA

or intraLATA carriers. At CLEC's request, Tandem Switching shall record and keep records of traffic for billing.

4.3.5 At CLEC's request, Tandem Switching shall provide overflow routing of traffic from a given trunk group or groups onto another trunk group or groups according to the methodology employed by Qwest as designated by CLEC.

4.4 Tandem Switching shall meet or exceed each of the requirements for Tandem Switching set forth in the following technical references:

4.4.1 Bell Communications Research TR-TSY-000540 Issue 2R2, Tandem Supplement, June 1, 1990;

4.4.2 GR-905-CORE covering CCSNIS;

4.4.3 GR-1429-CORE for call management features; and

4.4.4 GR-2863-CORE and GR-2902-CORE for CCS AIN interconnection.

5. Shared Transport

Qwest will provide unbundled access to Qwest transmission facilities between end offices, end offices and the tandem switch, and the tandem switch and end offices for completing local calls. Such transmission facilities would be shared with Qwest and, as applicable, with other CLECs. Transport routing shall be on an identical basis as routing is performed by Qwest, providing the same efficiencies that Qwest employs for itself. Costs will be allocated appropriately based upon the transmission path taken by each call. Shared transport shall meet the technical specifications as itemized below for Common Transport. Access to shared transport facilities shall be limited to Qwest's existing interoffice facilities.⁴

6. Common Transport

6.1 Definition

Common Transport is an interoffice transmission path between Qwest Network Elements shared by carriers. Where Qwest Network Elements are connected by intra-office wiring, such wiring is provided as a part of the Network Elements and is not Common Transport. Qwest shall offer Common Transport as of the Effective Date of this Agreement, at DS-0, DS-1, DS-3, STS-1 or higher transmission bit rate circuits. Common Transport consists of Qwest inter-office transport facilities and is distinct and separate from Local Switching.

6.2 Technical Requirements

6.2.1 Qwest shall be responsible for the engineering, provisioning, and maintenance of the underlying equipment and facilities used to provide Common Transport.

⁴ Arizona Bench Order, May 29, 1997, p. 1537, Procedural Order, July 14, 1997 at pages 16-17.

- 6.2.2 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, at a minimum, Common Transport shall meet all of the requirements set forth in the following technical references, as applicable for the transport technology being used:
- 6.2.2.1 ANSI T1.101-1994, American National Standard for Telecommunications-Synchronization Interface Standard Performance and Availability;
 - 6.2.2.2 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;
 - 6.2.2.3 ANSI T1.102.01-199x, American National Standard for Telecommunications- Digital Hierarchy - VT1.5;
 - 6.2.2.4 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;
 - 6.2.2.5 ANSI T1.105.01-1995, American National Standard for Telecommunications- Synchronous Optical Network (SONET) Automatic Protection Switching;
 - 6.2.2.6 ANSI T1.105.02-1995, American National Standard for Telecommunications- Synchronous Optical Network (SONET) - Payload Mappings;
 - 6.2.2.7 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Jitter at Network Interfaces;
 - 6.2.2.8 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET)-Jitter at Network Interfaces - DS-1 Supplement;
 - 6.2.2.9 ANSI T1.105.05-1994, American National Standard for Telecommunications- Synchronous Optical Network (SONET) - Tandem Connection;
 - 6.2.2.10 ANSI T1.105.06-199x, American National Standard for Telecommunications- Synchronous Optical Network (SONET) - Physical Layer Specifications;
 - 6.2.2.11 ANSI T1.105.07-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Sub STS-1 Interface Rates and Formats;

- 6.2.2.12 ANSI T1.105-09-199x, American National Standard for Telecommunications- Synchronous Optical Network (SONET) - Network Element Timing and Synchronization;
- 6.2.2.13 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);
- 6.2.2.14 ANSI T1.107-1988, American National Standard for Telecommunications - Digital Hierarchy - Formats Specifications;
- 6.2.2.15 ANSI T1.107a-1990, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications (DS3 Format Applications);
- 6.2.2.16 ANSI T1.107b-1991, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;
- 6.2.2.17 ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);
- 6.2.2.18 ANSI T1.403-1989, Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;
- 6.2.2.19 ANSI T1.404-1994, Network-to-Subscriber Installation - DS-3 Metallic Interface Specification;
- 6.2.2.20 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);
- 6.2.2.21 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;
- 6.2.2.22 Bellcore FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;
- 6.2.2.23 Bellcore GR-820-CORE, Generic Transmission Surveillance: DS-1 & DS-3 Performance;
- 6.2.2.24 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET); Common Generic Criteria;
- 6.2.2.25 Bellcore TR-NWT 000507, Transmission, Section 7, Issue 5 (Bellcore, December 1993) (A module of LSSGR, FR-NWT-000064.);
- 6.2.2.26 Bellcore TR-NWT-000776, Network Interface Description for ISDN Subscriber Access;

- 6.2.2.27 Bellcore TR-INS-000342, High-Capacity Digital Special Access Service-Transmission Parameter Limits and Interface Combinations, Issue 1, February 1991;
- 6.2.2.28 Bellcore ST-TEC-000052, Telecommunications Transmission Engineering Textbook, Volume 2: Facilities, Third Edition, Issue 1, May 1989;and
- 6.2.2.29 Bellcore ST-TEC-000051, Telecommunications Transmission Engineering Textbook Volume 1: Principles, Third Edition, Issue 1, August 1989.

7. Dedicated Transport

7.1 Definition:

Dedicated Transport is an interoffice transmission path between CLEC designated locations to which CLEC is granted exclusive use. Such locations may include Qwest central offices or other locations, CLEC network components, other carrier network components, or subscriber premises.

7.1.2 Qwest shall offer Dedicated Transport in each of the following manners:

7.1.2.1 as capacity on a shared facility;

7.1.2.2. as a circuit (e.g., DS-1, DS-3, STS-1) dedicated to CLEC; and

7.1.2.3 as a system (i.e., the equipment and facilities used to provide Dedicated Transport such as SONET ring) dedicated to CLEC.

7.1.3 When Dedicated Transport is provided as a circuit or as capacity on a shared facility, it shall include, as appropriate:

7.1.3.1 multiplexing functionality;

7.1.3.2 grooming functionality; and,

7.1.3.3 redundant equipment and facilities necessary to support protection and restoration.

7.1.4 When Dedicated Transport is provided as a system, it shall include:

7.1.4.1 transmission equipment such as multiplexers, line terminating equipment, amplifiers, and regenerators;

7.1.4.2 inter-office transmission facilities such as optical fiber, **dark fiber**⁵, copper twisted pair, and coaxial cable;

⁵ MCI Order, p. 8 at Issue 9C and AT&T Order, p. 12 at Issue 22.

7.1.4.3 redundant equipment and facilities necessary to support protection and restoration; and

7.1.4.4 access to the Digital Cross-Connect System ("DCS") functionality as an option in the same manner provided to IXCs that purchase transport services. DCS is described below in Section 7.5 of this Attachment.

7.2 Technical Requirements

This Section sets forth technical requirements for all Dedicated Transport.

7.2.1 When Qwest provides Dedicated Transport as a circuit or a system, the entire designated transmission circuit or system (e.g., DS-1, DS-3, STS-1) shall be dedicated to CLEC designated traffic.

7.2.2 Qwest shall offer Dedicated Transport using currently available technologies including, but not limited to, DS-1 and DS-3 transport systems, SONET Bi-directional Line Switched Rings, SONET Unidirectional Path Switched Rings, and SONET point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates.

7.2.3 When requested by CLEC, Dedicated Transport shall provide physical diversity. Physical diversity means that two (2) circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.

7.2.4 When physical diversity is requested by CLEC, Qwest shall provide the maximum feasible physical separation between transmission paths for all facilities and equipment unless otherwise agreed to by CLEC.

7.2.5 Upon CLEC's written request and where available in the Qwest network, Qwest shall provide real time and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, CLEC's traffic.

7.2.6 Qwest shall offer the following interface transmission rates for Dedicated Transport:

7.2.6.1 DS-1 (Extended SuperFrame - ESF/B8ZS, D4, and unframed applications shall be provided, except for those local/EAS tandems as designated by Qwest);

7.2.6.2 DS-3 (C-bit Parity, M13, and unframed applications shall be provided);

7.2.6.3 SONET standard interface rates in accordance with ANSI T1.105 and ANSI T1.105.07 and physical interfaces per ANSI T1.106.06, including referenced interfaces. In particular, VT1.5 based STS-1s will be the interface at a CLEC service node; and

7.2.6.4 where available, SONET standard interface rates in accordance with International Telecommunications Union ("ITU") Recommendation G.707

and Plesiochronous Digital Hierarchy (PDH) rates per ITU Recommendation G.704.

7.2.7 Qwest shall provide intraoffice wiring up to a suitable Point of Termination ("POT") between Dedicated Transport and CLEC designated equipment. Qwest shall provide the following equipment for the physical POT:

7.2.7.1 DSX1 or DCS for DS-1s or VT1.5s;

7.2.7.2 DSX3 or DCS for DS-3s or STS-1s; and

7.2.7.3 Light guide cross-connect for optical signals (e.g., OC-3 and OC-12).

7.2.8 For Dedicated Transport provided as a system, Qwest shall design the system, including, but not limited to, facility routing and termination points, according to CLEC specifications.

7.2.9 Upon CLEC's request and where available, Qwest shall provide CLEC with electronic provisioning control, of CLEC specified Dedicated Transport via Command-A-Link or equivalent interface in the same manner as is provided to IXCs.

7.2.10 Qwest shall offer Dedicated Transport together with and separately from DCS.

7.3 Technical Requirements for Dedicated Transport Using SONET Technology.

This Section sets forth additional technical requirements for Dedicated Transport using SONET technology including rings, point-to-point systems, and linear add-drop systems.

7.3.1 All SONET Dedicated Transport provided as a system shall:

7.3.1.1 be synchronized with a primary Stratum 1 level timing source;

7.3.1.2 provide SONET standard interfaces as available in the Qwest network and consistent with generally accepted industry standards which properly interwork with SONET standard equipment from other vendors, including, but not limited to, SONET standard section, line and path performance monitoring, maintenance signals, alarms, and data channels;

7.3.1.3 provide Data Communications Channel ("DCC") or equivalent connectivity through the SONET transport system. Dedicated Transport provided over a SONET transport system shall be capable of routing DCC messages between CLEC and SONET network components connected to the Dedicated Transport. For example, if CLEC leases a SONET ring from Qwest, that ring shall support DCC message routing between CLEC and SONET network components connected to the ring; and

7.3.1.4 support the following performance requirements for each circuit (STS-1, DS-1, DS-3, etc.):

7.3.1.4.1 no more than ten (10) Errored Seconds Per Day (Errored Seconds are defined in the technical reference at Section 7.4.5); and

7.3.1.4.2 no more than one (1) Severely Errored Second Per Day (Severely Errored Seconds are defined in the technical reference at Section 7.4.5).

7.3.2 SONET rings shall:

7.3.2.1 be provisioned on physically diverse fiber optic cables (including separate building entrances where available). "Diversely routed" shall be interpreted as the maximum feasible physical separation between transmission paths, unless otherwise agreed to by CLEC;

7.3.2.2 support dual ring interworking per SONET Standards where available in the Qwest network;

7.3.2.3 provide the necessary redundancy in optics, electronics, and transmission paths such that no single failure will cause a service interruption;

7.3.2.4 where available, provide the ability to disable ring protection switching at CLEC's direction (selective protection lock-out). This requirement applies to line switched rings only;

7.3.2.5 where available, provide the ability to use the protection channels to carry extra traffic. This requirement applies to line switched rings only;

7.3.2.6 provide 50 millisecond restoration as defined in SONET standards;

7.3.2.7 where available, have settable ring protection switching thresholds that shall be set in accordance with CLEC's specifications;

7.3.2.8 where available, provide revertive protection switching with a settable wait to restore delay with a default setting of five (5) minutes. This requirement applies to line switched rings only;

7.3.2.9 provide non-revertive protection switching. This requirement applies to path switched rings only; and

7.3.2.10 adhere to the following availability requirements, where availability is defined in the technical reference set forth in Section 7.4.5:

7.3.2.10.1 no more than 0.25 minutes of unavailability per month; and

7.3.2.10.2 no more than 0.5 minutes of unavailability per year.

7.4 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, at a minimum, Dedicated Transport shall meet each of the requirements set forth in Section 7.2.3 of this Attachment and in the following technical references:

7.4.1 ANSI T1.105.04-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Data Communication Channel Protocols and Architectures;

7.4.2 ANSI T1.119-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications;

7.4.3 ANSI T1.119.01-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Protection Switching Fragment;

7.4.4 ANSI T1.119.02-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) Operations, Administration, Maintenance, and Provisioning (OAM&P) Communications Performance Monitoring Fragment; and

7.4.5 ANSI T1.231-1993 -American National Standard for Telecommunications - Digital Hierarchy - Layer 1 In-Service Digital Transmission Performance Monitoring.

7.5 Digital Cross-Connect System

7.5.1 Definition

7.5.1.1 Digital Cross-Connect System ("DCS") is a function which provides automated cross connection of Digital Signal level 0 (DS-0) or higher transmission bit rate digital channels within physical interface facilities. Types of DCSs include, but are not limited to, DCS 1/0s, DCS 3/1s, and DCS 3/3s, where the nomenclature 1/0 denotes interfaces typically at the DS-1 rate or greater with cross-connection typically at the DS-0 rate. This same nomenclature, at the appropriate rate substitution, extends to the other types of DCSs specifically cited as 3/1 and 3/3. Types of DCSs that cross-connect Synchronous Transport Signal level 1 (STS-1) or other Synchronous Optical Network (SONET) signals (e.g., STS-3) are also DCSs, although not denoted by this same type of nomenclature. DCS may provide the functionality of more than one of the aforementioned DCS types (e.g., DCS 3/3/1 which combines functionality of DCS 3/3 and DCS 3/1). For such DCSs, the requirements will be, at least, the aggregation of requirements on the "component" DCSs.

7.5.1.2 In locations where automated cross connection capability does not exist, a Digital Signal Cross-Connect ("DSX") or light guide cross-connect patch panels and D4 channel banks or other DS-0 and above multiplexing equipment used to provide the function of a manual cross connection will be made available.

7.5.1.3 Interconnection between a DSX or light guide cross-connect, to a switch, another cross-connect, or other service platform device, is included as part of DCS.

7.6 DCS Technical Requirements

- 7.6.1 DCS shall provide completed end-to-end cross connection of the channels designated by CLEC.
- 7.6.2 DCS shall perform facility grooming, multipoint bridging, one-way broadcast, two-way broadcast, and facility test functions, where technically feasible.
- 7.6.3 DCS shall provide multiplexing, format conversion, signaling conversion, or other functions, where technically feasible.
- 7.6.4 The end-to-end cross connection shall be input to the underlying device used to provide DCS from an operator at a terminal or via an intermediate system. The cross connection assignment shall remain in effect whether or not the circuit is in use.
- 7.6.5 Qwest shall administer and maintain DCS.
- 7.6.6 Where available, Qwest shall provide various types of DCSs, including:
 - 7.6.6.1 DS-0 cross-connects (typically termed DCS 1/0);
 - 7.6.6.2 DS1/VT1.5 (Virtual Tributaries at the 1.5Mbps rate) cross-connects (typically termed DCS 3/1);
 - 7.6.6.3 DS-3 cross-connects (typically termed DCS 3/3);
 - 7.6.6.4 STS-1 cross-connects; and
 - 7.6.6.5 other technically feasible cross-connects designated by CLEC.
- 7.6.7 Qwest shall provide immediate and continuous configuration and reconfiguration of the channels between the physical interfaces (i.e., Qwest shall establish the processes to implement cross connects on demand), where available, based on engineering forecasts.
- 7.6.8 Qwest shall provide scheduled configuration and reconfiguration of the channels between the physical interfaces (i.e., Qwest shall establish the processes to implement cross connects on the schedule designated by CLEC) or, at CLEC's option, permit CLEC to control such configurations and reconfigurations, where available, based on engineering forecasts.
- 7.6.9 DCS shall continuously monitor protected circuit packs and redundant common equipment.

- 7.6.10 DCS shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.
- 7.6.11 DCS equipment shall be equipped with a redundant power supply or a battery back-up.
- 7.6.12 Qwest shall have available and utilize spare maintenance facilities and equipment necessary for provisioning repairs.
- 7.6.13 At CLEC's option, Qwest shall provide, where available, CLEC with real time performance monitoring and alarm data on the signals and the components of the underlying equipment used to provide DCS that actually impact or might impact CLEC's services. For example, this may include hardware alarm data and facility alarm data on a DS-3 in which a CLEC DS-1 is traversing.
- 7.6.14 At CLEC's option, Qwest shall provide CLEC with real time ability to initiate tests on integrated equipment used to test the signals and the underlying equipment used to provide DCS, as well as other integrated functionality for routine testing and fault isolation where available.
- 7.6.15 Where available, DCS shall provide SONET to asynchronous gateway functionality (e.g., STS-1 to DS-1 or STS-1 to DS-3).
- 7.6.16 Where available, DCS shall perform optical to electrical conversion where the underlying equipment used to provide DCS contains optical interfaces or terminations (e.g., Optical Carrier level 3, i.e., OC-3, interfaces on a DCS 3/1).
- 7.6.17 Where available, DCS shall have SONET ring terminal functionality where the underlying equipment used to provide DCS acts as a terminal on a SONET ring.
- 7.6.18 DCS shall provide multipoint bridging of multiple channels to other DCSs. CLEC may designate multipoint bridging to be one-way broadcast from a single master to multiple tributaries, or two-way broadcast between a single master and multiple tributaries.
- 7.6.19 DCS shall multiplex lower speed channels onto a higher speed interface and demultiplex higher speed channels onto lower speed interfaces as designated by CLEC.

7.7 DCS Interface Requirements

- 7.7.1 Qwest shall provide physical interfaces on DS-0, DS-1, and VT1.5 channel cross-connect devices at the DS-1 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and CLEC standards.
- 7.7.2 Qwest shall provide physical interfaces on DS-3 channel cross-connect devices at the DS-3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and CLEC standards.

- 7.7.3 Qwest shall provide physical interfaces on STS-1 cross-connect devices at the OC-3 rate or higher. In all such cases, these interfaces shall be in compliance with applicable Bellcore, ANSI, ITU, and CLEC standards.
- 7.7.4 Interfaces on all other cross-connect devices shall be in compliance with applicable Bellcore, ANSI, ITU, and CLEC standards.
- 7.8 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, DCS shall, at a minimum, meet all the requirements set forth in the following technical references:
 - 7.8.1 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;
 - 7.8.2 ANSI T1.102.01-199x, American National Standard for Telecommunications - Digital Hierarchy - VT1.5;
 - 7.8.3 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;
 - 7.8.4 ANSI T1.105.03-1994, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Jitter at Network Interfaces;
 - 7.8.5 ANSI T1.105.03a-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET): Jitter at Network Interfaces - DS-1 Supplement;
 - 7.8.6 ANSI T1.105.06-199x, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Physical Layer Specifications;
 - 7.8.7 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);
 - 7.8.8 ANSI T1.107-1988, American National Standard for Telecommunications - Digital Hierarchy - Formats Specifications;
 - 7.8.9 ANSI T1.107a-1990, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications (DS-3 Format Applications);
 - 7.8.10 ANSI T1.107b-1991, American National Standard for Telecommunications - Digital Hierarchy - Supplement to Formats Specifications;
 - 7.8.11 ANSI T1.117-1991, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (SONET) (Single Mode - Short Reach);
 - 7.8.12 ANSI T1.403-1989, Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;

- 7.8.13 ANSI T1.404-1994, Network-to-Subscriber Installation - DS-3 Metallic Interface Specification;
- 7.8.14 ITU Recommendation G.707, Network node interface for the synchronous digital hierarchy (SDH);
- 7.8.15 ITU Recommendation G.704, Synchronous frame structures used at 1544, 6312, 2048, 8488 and 44736 kbit/s hierarchical levels;
- 7.8.16 FR-440 and TR-NWT-000499, Transport Systems Generic Requirements (TSGR): Common Requirements;
- 7.8.17 GR-820-CORE, Generic Transmission Surveillance: DS1 & DS3 Performance;
- 7.8.18 GR-253-CORE, Synchronous Optical Network Systems (SONET): Common Generic Criteria; and
- 7.8.19 TR-NWT-000776, Network Interface Description for ISDN Subscriber Access.

8. Loop

8.1 Definition

8.1.1 A Loop is a transmission facility between a distribution frame, or its equivalent, in a Qwest central office or wire center, and the Network Interface Device (as defined herein) or network interface at a subscriber's premises, to which CLEC are granted exclusive use. This includes, but is not limited to, two-wire and four-wire analog voice-grade loops, and two-wire and four-wire loops that are conditioned to transmit the digital signals needed to provide ISDN, ADSL, HDSL, and DS-1 level signals. A Loop may be composed of the following components:

- Loop Concentrator/Multiplexer
- Loop Feeder
- Network Interface Device (NID)
- Distribution

8.1.1.1⁶ CLEC may purchase Loop and NID on an unbundled basis. **CLEC shall use the Bona Fide Request process set forth in Part A of this Agreement to request unbundling of Loop Concentrator/Multiplexer, Loop Feeder and Distribution.**

8.1.2 If Qwest uses Integrated Digital Loop Carrier ("DLCs") systems to provide the local Loop, Qwest will make alternate arrangements, equal in quality, to permit CLEC to order a contiguous unbundled local Loop. These arrangements may, at Qwest's option, include the following: providing CLEC with copper facilities or universal DLC that meet established technical parameters, deploying Virtual Remote Terminals,

⁶ MCI Order, p. 7 at Issue 9(a).

allowing CLEC to purchase the entire Integrated DLC, or converting integrated DLCs to non-integrated systems.

- 8.1.3 Qwest shall provide the BRI U interface using 2-wire copper loops in accordance with TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.

8.2 Technical Requirements

Subdivided to each component as detailed below.

8.3 Interface Requirements

Subdivided to each component as detailed below.

8.4 Loop Components

8.4.1 Loop Concentrator/Multiplexer

8.4.1.1 Definition:

8.4.1.1.1 The Loop Concentrator/Multiplexer is the Network Element that:

(a) aggregates lower bit rate or bandwidth signals to higher bit rate or bandwidth signals (multiplexing); (b) disaggregates higher bit rate or bandwidth signals to lower bit rate or bandwidth signals (demultiplexing); (c) aggregates a specified number of signals or channels to fewer channels (concentrating); (d) performs signal conversion, including encoding of signals (e.g., analog to digital and digital to analog signal conversion); and (e) in some instances performs electrical to optical (E/O) conversion.

8.4.1.1.2 The Loop Concentrator/Multiplexer function may be provided through a DLC system, channel bank, multiplexer or other equipment at which traffic is encoded and decoded, multiplexed and demultiplexed, or concentrated.

8.4.1.2 Technical Requirements

8.4.1.2.1 The Loop Concentrator/Multiplexers shall be capable of performing its functions on the signals for the following services, as needed by CLEC to provide end-to-end service capability to its subscriber, including, but not limited to:

8.4.1.2.1.1 two-wire & four-wire analog voice grade loops;

8.4.1.2.1.2 two-wire & four-wire loops conditioned to transmit the digital signals needed to provide digital services;

8.4.1.2.1.3 4-wire digital data (2.4Kbps through 64Kbps and "n" times 64Kbps (where $n < 24$);

8.4.1.2.1.4 DS-3 rate private lines where available; and

8.4.1.2.1.5 Optical SONET rate private lines where available.

8.4.1.2.2 The Loop Concentrator/Multiplexer shall perform the following functions as appropriate:

8.4.1.2.2.1 analog to digital signal conversion of both incoming and outgoing (upstream and downstream) analog signals;

8.4.1.2.2.2 multiplexing of the individual digital signals up to higher transmission bit rate signals (e.g., DS-0, DS-1, DS-3, or optical SONET rates) for transport to the Qwest central office through the Loop Feeder; and

8.4.1.2.2.3 concentration of end-user subscriber signals onto fewer channels of a Loop Feeder (when available the concentration ratio shall be as specified from time to time by CLEC).

8.4.1.2.2.4 Concentration ratios shall not impair analog or digital performance.

8.4.1.2.3. CLEC may request Qwest to provide power for the Loop Concentrator/Multiplexer through a non-interruptible source, if the function is performed in a central office, or from a commercial AC power source with battery backup, if the equipment is located outside a central office. Such power shall also adhere to the requirements stated herein.

8.4.1.2.4 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, the Loop Concentrator/Multiplexer shall be provided to CLEC in accordance with the following Technical References:

8.4.1.2.4.1 Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems, Issue 2, January 1993;

8.4.1.2.4.2 Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines;

8.4.1.2.4.3 T1.106 - 1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);

8.4.1.2.4.4 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET)

- Basic Description including Multiplex Structure, Rates and Formats;

8.4.1.2.4.5 ANSI T1.102-1993, American National Standard for Telecommunications- Digital Hierarchy - Electrical Interfaces;

8.4.1.2.4.6 ANSI T1.403-1989, American National Standard for Telecommunications - Carrier to Subscriber Installation, DS-1 Metallic Interface Specification;

8.4.1.2.4.7 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria;

8.4.1.2.4.8 Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2, August 1987;

8.4.1.2.4.9 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 1992; Rev. 1, December 1993; Supplement 1, December 1993;

8.4.1.2.4.10 Bellcore TR-TSY-000673, Operations Systems Interface for an IDLC System, (LSSGR) FSD 20-02-2100, Issue 1, September 1989; and

8.4.1.2.4.11 Bellcore Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, GR-303-CORE, Issue 1, September 1995.

8.4.1.3 Requirements for an Intelligent Loop Concentrator/Multiplexer:

8.4.1.3.1 In addition to the basic functions described above for the Loop Concentrator/Multiplexer, the Intelligent Loop Concentrator/Multiplexer ("IC/M") shall provide facility grooming, facility test functions, format conversion and signaling conversion, as appropriate.

8.4.1.3.2 The underlying equipment that provides such IC/M function shall continuously monitor protected circuit packs and redundant common equipment.

8.4.1.3.3 The underlying equipment that provides such IC/M function shall automatically switch to a protection circuit pack on detection of a failure or degradation of normal operation.

8.4.1.3.4 The underlying equipment that provides such IC/M function shall be equipped with a redundant power supply or a battery back-up.

- 8.4.1.3.5 CLEC may request Qwest to provide CLEC with real time performance monitoring and alarm data on IC/M elements that may affect CLEC's traffic. This includes IC/M hardware alarm data and facility alarm data on the underlying device that provides such IC/M function.
- 8.4.1.3.6 CLEC may request Qwest to provide CLEC with real time ability to initiate tests on the underlying device that provides such IC/M function integrated test equipment as well as other integrated functionality for routine testing and fault isolation.

8.4.1.4 Interface Requirements

- 8.4.1.4.1 The Loop Concentrator/Multiplexer shall meet the following interface requirements, as appropriate for the configuration that CLEC designates:
- 8.4.1.4.2 The Loop Concentrator/Multiplexer shall provide an analog voice frequency copper twisted pair interface at the serving wire center.
- 8.4.1.4.3 The Loop Concentrator/Multiplexers shall provide digital 4-wire electrical interfaces at the serving wire center.
- 8.4.1.4.4 The Loop Concentrator/Multiplexer shall provide optical SONET interfaces at rates of O1.C-3, OC-12, OC-48, and OC-N.
- 8.4.1.4.5 The Loop Concentrator/Multiplexers shall provide the Bellcore TR-303 DS-1 level interface at the serving wire center. Loop Concentrator/Multiplexer shall provide Bellcore TR-08 modes 1&2 DS1 interfaces when designated by CLEC.
- 8.4.1.4.6 The Intelligent Loop Concentrator/Multiplexer shall be provided to CLEC in accordance with the Technical References set forth in Sections 8.4.1.2.4.8 through 8.4.1.2.4.11, above.

8.4.2 Loop Feeder

8.4.2.1 Definition:

- 8.4.2.1.1 The Loop Feeder is the Network Element that provides connectivity between (a) a Feeder Distribution Interface (FDI) associated with Loop Distribution and a termination point appropriate for the media in a central office, or (b) a Loop Concentrator/Multiplexer provided in a remote terminal and a termination point appropriate for the media in a central office.
- 8.4.2.1.2 Pursuant to a Bona Fide Request for unbundled feeder or distribution, Qwest shall provide CLEC physical access to the FDI and the right to connect the Loop Feeder to the FDI.

8.4.2.1.3⁷ Upon request from CLEC regarding a specific area, Qwest shall provide information on Feeder Distribution Interface (FDI) within a reasonable time. If such information is available as part of Qwest's operations support system, it must be made available to CLEC on the same terms and conditions as it is available to Qwest. Qwest need not provide information which is already publicly available.

8.4.2.1.4 The physical medium of the Loop Feeder may be copper twisted pair, or single or multi-mode fiber or other technologies as designated by CLEC. In certain cases, CLEC will require a copper twisted pair loop even in instances where the medium of the Loop Feeder for services that Qwest offers is other than a copper facility. Special construction charges may apply if no copper twisted pair facilities are available.

8.4.2.2 Requirements for Loop Feeder

8.4.2.2.1 The Loop Feeder shall be capable of transmitting analog voice frequency, basic rate ISDN, digital data, or, where available in the network, analog radio frequency signals, as appropriate.

8.4.2.2.2 Qwest shall provide appropriate power for all active elements in the Loop Feeder. Qwest will provide appropriate power from a central office source, or from a commercial AC source with rectifiers for AC to DC conversion and 8-hour battery back-up when the equipment is located in an outside plant Remote Terminal ("RT").

8.4.2.3 Additional Requirements for Special Copper Loop Feeder Medium

In addition to the requirements set forth above, CLEC may require Qwest to provide copper twisted pair Loop Feeder unfettered by any intervening equipment (e.g., filters, load coils, and range extenders), so that CLEC can use these Loop Feeders for a variety of services by attaching appropriate terminal equipment at the ends.

8.4.2.4 Additional Technical Requirements for DS-1 Conditioned Loop Feeder

In addition to the requirements set forth above, CLEC may designate that the Loop Feeder be conditioned to transport a DS-1 signal. The requirements for such transport are defined in the references below in Section 8.4.2.6.

8.4.2.5 Additional Technical Requirements for Optical Loop Feeder

In addition to the requirements set forth above, CLEC may designate that Loop Feeder will transport DS-3 and OC-n (where "n" is defined in the technical

⁷ MCIm Order, p. 24 at Issue 42.

reference in Section 8.4.1.2.4.4). The requirements for such transport are defined in the references below in Section 8.4.2.6.

8.4.2.6 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, Qwest shall offer Loop Feeder in compliance with the requirements set forth in the following Technical References:

- 8.4.2.6.1 Bellcore Technical Requirement TR-NWT-000499, Issue 5, December 1993, section 7 for DS-1 interfaces;
- 8.4.2.6.2 Bellcore TR-NWT-000057, Functional Criteria for Digital Loop Carrier Systems, Issue 2, January 1993;
- 8.4.2.6.3 Bellcore TR-NWT-000393, Generic Requirements for ISDN Basic Access Digital Subscriber Lines;
- 8.4.2.6.4 ANSI T1.106-1988, American National Standard for Telecommunications - Digital Hierarchy - Optical Interface Specifications (Single Mode);
- 8.4.2.6.5 ANSI T1.105-1995, American National Standard for Telecommunications - Synchronous Optical Network (SONET) - Basic Description including Multiplex Structure, Rates and Formats;
- 8.4.2.6.6 ANSI T1.102-1993, American National Standard for Telecommunications - Digital Hierarchy - Electrical Interfaces;
- 8.4.2.6.7 ANSI T1.403-1989, American National Standard for Telecommunications - Carrier to Subscriber Installation, DS-1 Metallic Interface Specification; and
- 8.4.2.6.8 Bellcore GR-253-CORE, Synchronous Optical Network Systems (SONET), Common Generic Criteria.

8.4.2.7 Interface Requirements

8.4.2.7.1 The Loop Feeder point of termination ("POT") within a Qwest central office will be as follows:

8.4.2.7.1.1 Copper twisted pairs shall terminate on the MDF;

8.4.2.7.1.2 DS-1 Loop Feeder shall terminate on a DSX1, DCS1/0 or DCS3/1; and

8.4.2.7.1.3 Fiber optic cable shall terminate on a light guide termination panel or equivalent.

8.4.2.7.2 In accordance with Sections 1.3.1 and 1.3.2 of Part A of this Agreement, Loop Feeder shall be equal to or better than each of

the applicable interface requirements set forth in the following technical references:

8.4.2.7.2.1 Bellcore TR-TSY-000008, Digital Interface Between the SLC 96 Digital Loop Carrier System and a Local Digital Switch, Issue 2, August 1987;

8.4.2.7.2.2 Bellcore TR-NWT-000303, Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, Issue 2, December 1992; Rev. 1, December 1993; Supplement 1, December 1993; and

8.4.2.7.2.3 Bellcore Integrated Digital Loop Carrier System Generic Requirements, Objectives and Interface, GR-303-CORE, Issue 1, September 1995.

9. Distribution

9.1 Definition:

9.1.1 Distribution provides connectivity between the NID component of Loop Distribution and the terminal block on the subscriber-side of an FDI. The FDI is a device that terminates the Distribution Media and the Loop Feeder, and cross-connects them in order to provide a continuous transmission path between the NID and a telephone company central office. There are three (3) basic types of feeder-distribution connections: (a) multiple (splicing of multiple distribution pairs onto one (1) feeder pair); (b) dedicated ("home run"); and (c) interfaced ("cross-connected"). While older plant uses multiple and dedicated methods, newer plant and all plant that uses DLC or other pair-gain technology necessarily uses the interfaced connection method. The feeder-distribution interface ("FDI") in the interfaced design makes use of a manual cross-connection, typically housed inside an outside plant device ("green box") or in a vault or manhole.

9.1.2 The Distribution may be copper twisted pair, coax cable, single or multi-mode fiber optic cable or other technologies. A combination that includes two (2) or more of these media is also possible. In certain cases, CLEC shall require a copper twisted pair Distribution even in instances where the Distribution for services that Qwest offers is other than a copper facility. Special construction charges may apply if no copper twisted pair facilities are available.

9.2 Requirements for All Distribution

9.2.1 Distribution shall be capable of transmitting signals for the following services, as requested by CLEC:

9.2.1.1 two-wire & four-wire analog voice grade loops; and

9.2.1.2 two-wire & four-wire loops conditioned to transmit the digital signals needed to provide digital services.

9.2.2 Distribution shall transmit all signaling messages or tones. Where the Distribution includes any active elements that terminate any of the signaling messages or tones, these messages or tones shall be reproduced by the Distribution at the interfaces to an adjacent Network Element in a format that maintains the integrity of the signaling messages or tones.

9.2.3 Qwest shall not interfere with CLEC's ability to support functions associated with provisioning, maintenance, performance monitoring and testing of the unbundled Distribution.

9.2.4 Distribution shall be equal to or better than all of the applicable requirements set forth in the following technical references:

9.2.4.1 Bellcore TR-TSY-000057, "Functional Criteria for Digital Loop Carrier Systems"; and

9.2.4.2 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines".

9.3 Additional Requirements for Special Copper Distribution

In addition to Distribution that supports the requirements set forth in Section 9.2. above, CLEC may designate Distribution to be copper twisted pair unfettered by any intervening equipment (e.g., filters, load coils, range extenders) so that CLEC can use these loops for a variety of services by attaching appropriate terminal equipment at the ends.

9.4 Additional Requirements for Fiber Distribution

Fiber optic cable Distribution shall be capable of transmitting signals for the following services in addition to the those set forth in Section 9.2.1 above:

9.4.1 DS-3 rate private line service;

9.4.2 Optical SONET OC-n rate private lines (where "n" is defined in the technical reference in Section 8.4.1.2.4.4); and

9.4.3 Where available in the Qwest network, Analog Radio Frequency based services (e.g., Cable Television (CATV)).

9.5 Additional Requirements for Coaxial Cable Distribution

Where available in the Qwest network, coaxial cable (coax) Distribution shall be capable of transmitting signals for the following services in addition to those set forth in Section 9.2.1 above:

9.5.1 Broadband data, either one way or bi-directional, symmetric or asymmetric, at rates between 1.5 Mb/s and 45 Mb/s; and

9.5.2 Analog Radio Frequency based services (e.g., CATV).

9.6 Interface Requirements

9.6.1 Signal transfers between the Distribution and the NID and an adjacent Network Element shall have levels of degradation that are within the performance requirements set forth in Section 18.2 of this Attachment.

9.6.2 Distribution shall be at least equal to each of the applicable interface requirements set forth in the following technical references:

9.6.2.1 Bellcore TR-NWT-000049, "Generic Requirements for Outdoor Telephone Network Interface Devices", issued December 1, 1994;

9.6.2.2 Bellcore TR-NWT-000057, "Functional Criteria for Digital Loop Carrier Systems", issued January 2, 1993;

9.6.2.3 Bellcore TR-NWT-000393, "Generic Requirements for ISDN Basic Access Digital Subscriber Lines"; and

9.6.2.4 Bellcore TR-NWT-000253, SONET Transport Systems: Common Criteria (A module of TSGR, FR-NWT-000440), Issue 2, December 1991.

10. Local Switching

10.1 Definition:

10.1.1 Local Switching is the Network Element that provides the functionality required to connect the appropriate lines or trunks wired to the Main Distributing Frame ("MDF") or Digital Cross Connect ("DSX") panel to a desired line or trunk. The desired connection path for each call type will vary by subscriber and will be specified by CLEC as a routing scenario that will be implemented in advance as part of or after the purchase of the unbundled Local Switching. **Such functionality shall include all of the features, functions, and capabilities that the underlying Qwest local switch is capable of providing⁸, including, but not limited to: line signaling and signaling software, digit reception, dialed number translations, call screening, routing, recording, call supervision, dial tone, switching, telephone number provisioning, announcements, calling features and capabilities (including call processing), Centrex, or Centrex-like services, Automatic Call Distributor ("ACD"), Carrier pre-subscription (e.g., long distance carrier, intraLATA toll), Carrier Identification Code ("CIC"), number portability capabilities, testing and other operational features inherent to the switch and switch software.** The Local Switching function also provides access to transport, signaling (ISDN User Part ("ISUP") and Transaction Capabilities Application Part ("TCAP"), and platforms such as adjuncts, Public Safety Systems (911), Operator Services, Directory Assistance Services and Advanced Intelligent

⁸ MCI Order, p. 25 and AT&T Order at Issue 18.

Network ("AIN"). Remote Switching Module functionality is included in the Local Switching function. Local Switching shall also be capable of routing local, intraLATA, interLATA, and international calls to the subscriber's preferred carrier, call features (e.g., call forwarding) and Centrex capabilities.

- 10.1.2 Local Switching, including the ability to route to CLEC's transport facilities, dedicated facilities and systems, shall be unbundled from all other unbundled Network Elements, i.e., Operator Systems, Common Transport, Shared Transport and Dedicated Transport.

10.2 Technical Requirements

- 10.2.1 Local Switching shall be equal to or better than the requirements for Local Switching set forth in Bellcore's Local Switching Systems General Requirements FR-NWT-000064.

- 10.2.1.1 Qwest shall route calls to the appropriate trunk or lines for call origination or termination.

- 10.2.1.2 Qwest shall route calls on a per line or per screening class basis to (a) Qwest platforms providing Network Elements or additional requirements, (b) CLEC designated platforms, or (c) third-party platforms.

- 10.2.1.3 Qwest shall provide to CLEC recorded announcements as furnished by CLEC and call progress tones to alert callers of call progress and disposition. The installation cost shall be borne by CLEC for such announcements and call progress tones to the extent they are different than those standardly used by Qwest.

- 10.2.1.4 Qwest shall change a subscriber from Qwest's services to CLEC's services without loss of feature functionality, unless designated otherwise by CLEC.

- 10.2.1.5 Qwest shall perform routine testing (e.g., Mechanized Loop Tests ("MLT") and test calls such as 105, 107 and 108 type calls) and fault isolation on CLEC's unbundled Network Elements, as designated by CLEC.

- 10.2.1.6 Qwest shall repair and restore any equipment or any other maintainable component that may adversely impact CLEC's use of unbundled Local Switching.

- 10.2.1.7 Qwest shall control congestion points such as mass calling events and network routing abnormalities using capabilities such as Automatic Call Gapping, Automatic Congestion Control, and Network Routing Overflow. Application of such control shall be competitively neutral and not favor any user of unbundled switching or Qwest.

- 10.2.1.8 Qwest shall perform manual call trace as designated by CLEC and shall permit subscriber originated call trace.
- 10.2.1.9 Qwest shall record all billable events, involving usage of the Network Element, and send the appropriate recording data to CLEC as further described in Attachment 5.
- 10.2.1.10 For Local Switching used as E911 tandems, Qwest shall allow interconnection with CLEC switches in that same local switch used as a E911 tandem and shall route calls to the appropriate Public Safety Access Point (PSAP). In the event the Local Switching element and the E911 tandem are contained within the same Qwest switch, such trunking shall be provided on an intra-switch basis.
- 10.2.1.11 Where Qwest provides the following special services, it shall provide to CLEC:
 - 10.2.1.11.1 essential Service Lines;
 - 10.2.1.11.2 Telephone Service Prioritization ("TSP");
 - 10.2.1.11.3 related services for handicapped;
 - 10.2.1.11.4 where Qwest provides soft dial tone, it shall do so on a competitively-neutral basis; and
 - 10.2.1.11.5 any other service required by law or regulation.
- 10.2.1.12 Qwest shall provide Switching Service Point ("SSP") capabilities and signaling software to interconnect the signaling links destined to the Signaling Transfer Point Switch ("STP"). In the event Local Switching is provided out of a switch without SS7 capability, the Tandem shall provide this capability as further described in Section 4_ of this Attachment. These capabilities shall adhere to Bellcore specifications TCAP (GR-1432-CORE), ISUP (GR-905-CORE), Call Management (GR-1429-CORE), Switched Fractional DS1 (GR-1357-CORE), Toll Free Service (GR-1428-CORE), Calling Name (GR-1597-CORE), Line Information Database (GR-954-CORE), and Advanced Intelligent Network (GR-2863-CORE).
- 10.2.1.13 Qwest shall provide interfaces to adjuncts through industry standard and Bellcore interfaces. These adjuncts may include, but are not limited to, Service Node, Service Circuit Node, Voice Mail and Automatic Call Distributors. Examples of existing interfaces are ANSI ISDN standards Q.931 and Q.932.
- 10.2.1.14 Upon CLEC's request, Qwest shall provide performance data regarding a subscriber line, traffic characteristics or other measurable elements to CLEC.

10.2.1.15 Qwest shall offer all technically feasible Local Switching features, and, in providing such features, do so at parity with those provided by Qwest to itself or any other Person.

10.2.1.15.1 Such feature offerings shall include, but are not limited to:

Basic and primary rate ISDN;
Residential features;
Custom Local Area Signaling Services (CLASS/LASS);
Custom Calling Features; and
Centrex (including equivalent administrative capabilities, such as subscriber accessible reconfiguration and detailed message recording).

10.2.1.15.2⁹ **CLEC may use the Bona Fide Request process set forth in Part A of this Agreement to request unbundling of Advanced Intelligent Network ("AIN") triggers supporting CLEC and Qwest service applications in Qwest's SCPs. Qwest shall offer AIN-based services in accordance with applicable technical references. Such services may include, but are not limited to:**

10.2.1.15.2.1 Off-Hook Immediate;

10.2.1.15.2.2 Off-Hook Delay;

10.2.1.15.2.3 Private EAMF Trunk;

10.2.1.15.2.4 Shared Interoffice Trunk (EAMF, SS7);

10.2.1.15.2.5 Termination Attempt;

10.2.1.15.2.6 3/6/10;

10.2.1.15.2.7 N11;

10.2.1.15.2.8 Feature Code Dialing;

10.2.1.15.2.9 Custom Dialing Plan(s), including 555 services; and

10.2.1.15.2.10 Automatic Route Selection.

⁹ MCI Order, p. 7 at Issue 9(b) and AT&T Order Issue 19. The Order states that AIN triggers must be unbundled when technically feasible without harm to the network. The BFR process incorporates this standard, so the following changes rely on that process to address future AIN trigger unbundling.

- 10.2.1.16 Qwest shall assign each CLEC subscriber line the class of service designated by CLEC (e.g., using line class codes or other switch specific provisioning methods), and at CLEC's option shall route Directory Assistance calls from CLEC subscribers as directed by CLEC. This includes each of the following call types:
- 10.2.1.16.1 0+/0- calls;
 - 10.2.1.16.2 911 calls;
 - 10.2.1.16.3 411/DA calls;
 - 10.2.1.16.4 InterLATA calls specific to PIC or regardless of PIC;
 - 10.2.1.16.5 IntraLATA calls specific to PIC or regardless of PIC;
 - 10.2.1.16.6 Toll free calls, prior to database query;
 - 10.2.1.16.7 Call forwarding of any type supported on the switch, to a line or a trunk; and
 - 10.2.1.16.8 Any other customized routing that may be supported by the Qwest switch.
- 10.2.1.17 Qwest shall assign each CLEC subscriber line the class of service designated by CLEC (e.g., using line class codes or other switch specific provisioning methods) and shall route operator calls from CLEC subscribers as directed by CLEC at CLEC's option. For example, Qwest may translate 0- and 0+ intraLATA traffic, and route the call through appropriate trunks to a CLEC Operator Services Position System ("OSPS"). Calls from Local Switching must pass the ANI-II digits unchanged.
- 10.2.1.18 If a CLEC customer subscribes to CLEC provided voice mail and messaging services, Qwest shall redirect incoming calls to the CLEC system based upon designated service arrangements (e.g., busy, don't answer, number of rings). In addition, Qwest shall provide a Standard Message Desk Interface-Enhanced (SMDI-E) interface to the CLEC system. Qwest shall support the Inter-switch Voice Messaging Service (IVMS) capability.
- 10.2.1.19 Local Switching shall be offered in accordance with the requirements of the following technical references and their future releases:
- 10.2.1.19.1 GR-1298-CORE, AIN Switching System Generic Requirements;
 - 10.2.1.19.2 GR-1299-CORE, AIN Switch-Service Control Point (SCP)/Adjunct Interface Generic Requirements;

10.2.1.19.3 TR-NWT-001284, AIN 0.1 Switching System Generic Requirements; and

10.2.1.19.4 SR-NWT-002247, AIN Release 1 Update.

10.2.2 Interface Requirements:

10.2.2.1 Qwest shall provide the following interfaces to Loops:

10.2.2.1.1 Standard Tip/Ring interface, including loopstart or groundstart, on-hook signaling (e.g., for calling number, calling name and message waiting lamp);

10.2.2.1.2 **Coin phone signaling capability;**¹⁰

10.2.2.1.3 Basic Rate Interface ISDN adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;

10.2.2.1.4 Two-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;

10.2.2.1.5 Four-wire analog interface to PBX to include reverse battery, E&M, wink start and DID;

10.2.2.1.6 Four-wire DS-1 interface to PBX or subscriber provided equipment (e.g., computers and voice response systems);

10.2.2.1.7 Primary Rate ISDN to PBX adhering to ANSI standards Q.931, Q.932 and appropriate Bellcore Technical Requirements;

10.2.2.1.8 Switched Fractional DS-1 with capabilities to configure Nx64 channels (where "n" = 1 to 24); and

10.2.2.1.9 Loops adhering to Bellcore TR-NWT-08 and TR-NWT-303 specifications to interconnect Digital Loop Carriers.

10.2.2.2 Qwest shall provide access to the following, but not limited to:

10.2.2.2.1 SS7 Signaling Network or Multi-Frequency trunking, if requested by CLEC;

10.2.2.2.2 Interface to CLEC operator services systems or Operator Services through appropriate trunk interconnections for the system; and

¹⁰ Procedural Order, July 14, 1997, at pages 17-18.

- 10.2.2.2.3 Interface to CLEC Directory Assistance Services through the CLEC switched network or to Directory Services through the appropriate trunk interconnections for the system; and 950 access or other CLEC required access to interexchange carriers as requested through appropriate trunk interfaces.

10.3 Customized Routing

10.3.1 Description

Customized routing will enable CLEC to direct particular classes of calls to particular outgoing trunks based upon line class codes. CLEC may use customized routing to direct its customers' calls to 411, 555-1212, 0+ or 0-, to its own Operator Services platform and Directory Assistance platform.

10.3.2 Limitations

Because there is a limitation in the technical feasibility of offering custom routing beyond the capacity of the 1A ESS switch, custom routing will be offered to CLECs on a first-come, first-served basis.

10.4 Integrated Services Digital Network (ISDN)

- 10.4.1 Integrated Services Digital Network ("ISDN") is defined in two (2) variations. The first variation is Basic Rate ISDN ("BRI"). BRI consists of 2 Bearer (B) Channels and one Data (D) Channel. The second variation is Primary Rate ISDN ("PRI"). PRI consists of 23 B Channels and one D Channel. Both BRI and PRI B Channels may be used for voice, Circuit Switched Data ("CSD") or Packet Switched Data ("PSD"). The BRI D Channel may be used for call related signaling, non-call related signaling or packet switched data. The PRI D Channel may be used for call related signaling.

10.4.2 Technical Requirements— ISDN

- 10.4.2.1 Qwest shall offer Data Switching providing ISDN that, at a minimum:

- 10.4.2.2 provides integrated Packet handling capabilities;

- 10.4.2.3 allows for full 2B+D Channel functionality for BRI; and

- 10.4.2.4 allows for full 23B+D Channel functionality for PRI.

- 10.4.2.5 Each B Channel shall allow for voice, 64 Kbps CSD, and PSD of 128 logical channels at minimum speeds of 19 Kbps throughput of each logical channel up to the total capacity of the B Channel.

- 10.4.2.6 Each B Channel shall provide capabilities for alternate voice and data on a per call basis.

10.4.2.7 The BRI D Channel shall allow for call associated signaling, non-call associated signaling and PSD of 16 logical channels at minimum speeds of 9.6 Kbps throughput of each logical channel up to the total capacity of the D channel.

10.4.2.8 The PRI D Channel shall allow for call associated signaling.

10.4.3 Interface Requirements — ISDN

10.4.3.1 Qwest shall provide the BRI interface using Digital Subscriber Loops adhering to Bellcore TR-NWT-303 Specifications to Interconnect Digital Loop Carriers.

10.4.3.2 Qwest shall offer PSD interfaces adhering to the X.25, X.75 and X.75' ANSI and Bellcore requirements.

10.4.3.3 Qwest shall offer PSD trunk interfaces operating at 56 Kbps.

11. Network Interface Device

11.1 Definition:

11.1.1 The Network Interface Device ("NID") is a single-line termination device or that portion of a multiple-line termination device required to terminate a single line or circuit. One of the functions of the NID is to establish the network demarcation point between a carrier and its subscriber. The NID features two (2) independent chambers or divisions which separate the service provider's network from the subscriber's inside wiring. Each chamber or division contains the appropriate connection points or posts to which the service provider and the subscriber each make their connections.

11.1.2 CLEC may connect its NID to Qwest's NID.

11.1.3 Qwest will allow CLEC to locate dropwires, other than Qwest's drop wires, inside an existing Qwest combination NID used in the provisioning of telephone service for single tenant end users subject to the following conditions:

11.1.3.1 Sufficient space exists inside the combination NID to allow proper installation of equipment in accordance with the NID manufacturers specifications and per the National Electric Code;

11.1.3.2 In order to maintain maintenance integrity for the NID, CLEC will install its own overvoltage protection and customer bridging equipment, terminate the dropwires to that equipment, and assume all operational responsibilities and liabilities for that equipment;

In the event sufficient space is not available in the existing Qwest NID, to accommodate additional drops, CLEC will be allowed to install an additional NID,

at its own expense and the CLEC's NID can be connected to the existing Qwest NID;

If the existing NID is not the new generation modular type, CLEC may install a new NID. Qwest will be allowed to move its drop wire to the new NID and remove the old NID;

Within ninety (90) days of the Effective Date of this Agreement, the Parties agree to jointly develop a satisfactory process to address the issues with access to single and multi-party NIDs.

- 11.1.4 With respect to multiple-line termination devices, CLEC shall specify the quantity of NIDs it requires within such device.

11.2 Technical Requirements

- 11.2.1 The NID shall provide a clean, accessible point of connection for the inside wiring and for the Distribution Media and/or cross connect to CLEC's NID and shall maintain a connection to ground meeting the requirements as set forth below.
- 11.2.2 The NID shall be capable of transferring electrical analog or digital signals between the subscriber's inside wiring and the Distribution Media and/or cross connect to CLEC's NID.
- 11.2.3 All NID posts or connecting points shall be in place, secure, usable and free of any rust or corrosion. The protective ground connection shall exist and be properly installed. The ground wire shall be free of rust and corrosion and have continuity to ground.
- 11.2.4 The NID shall be capable of withstanding all normal local environmental variations.
- 11.2.5 Where the NID is not located in a larger, secure cabinet or closet, the NID shall be protected from vandalism. The NID shall be accessible to CLEC designated personnel. In cases where entrance to the subscriber premises is required to give access to the NID, CLEC shall obtain entrance permission directly from the subscriber.
- 11.2.6 Qwest shall offer the NID together with, and separately from, the Distribution Media component of Loop Distribution.

11.3 Interface Requirements

- 11.3.1 The NID shall be the interface to subscribers' premises wiring for all loops.
- 11.3.2 The NID shall be at least equal to all the industry standards for NIDs set forth in the following technical references:
 - 11.3.2.1 Bellcore Technical Advisory TA-TSY-000120 "Subscriber Premises or Network Ground Wire";

- 11.3.2.2 Bellcore Generic Requirement GR-49-CORE "Generic Requirements for Outdoor Telephone Network Interface Devices";
- 11.3.2.3 Bellcore Technical Requirement TR-NWT-00239 "Indoor Telephone Network Interfaces";
- 11.3.2.4 Bellcore Technical Requirement TR-NWT-000937 "Generic Requirements for Outdoor and Indoor Building Entrance"; and
- 11.3.2.5 Bellcore Technical Requirement TR-NWT-0001 33 "Generic Requirements for Network Inside Wiring."

12. Operator Systems

See Part A.

13. E911

See Part A.

14. Directory Assistance Data

See Part A.

15. Signaling Link Transport

15.1 Definition:

Signaling Link Transport is a set of two (2) or four (4) dedicated 56 Kbps transmission paths between CLEC-designated Signaling Points of Interconnection ("SPOI") that provides appropriate physical diversity and a cross connect at a Qwest STP site.

15.2 Technical Requirements

15.2.1 Signaling Link Transport shall consist of full duplex mode 56 Kbps transmission paths.

15.2.2 Of the various options available, Signaling Link Transport shall perform in the following two ways:

15.2.1.1 as an "A-link" which is a connection between a switch or SCP and a home Signaling Transfer Point ("STP") pair; and

15.2.1.2 as a "D-link" which is a connection between two (2) STP pairs in different company networks (e.g., between two (2) STP pairs for two (2) (CLECs)).

15.2.3 Signaling Link Transport shall consist of two (2) or more signaling link layers as follows:

15.2.3.1 An A-link layer shall consist of two (2) links.

15.2.3.2 A D-link layer shall consist of four (4) links.

15.2.4 A signaling link layer shall satisfy a performance objective such that:

15.2.4.1 there shall be no more than two (2) minutes down time per year for an A-link layer transport only, and

15.2.4.2 there shall be negligible (less than 2 seconds) down time per year for a D-link layer transport only.

15.2.5 Where available, a signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:

15.2.5.1 no single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two (2) separate physical paths end-to-end); and

15.2.5.2 no two concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (i.e., the links should be provided on a minimum of three (3) separate physical paths end-to-end).

15.2.6 For requested link layers, Qwest will provide CLEC with the level of diversity available.

15.3 Interface Requirements

15.3.1 There shall be a DS-1 (1.544 Mbps) interface at the CLEC-designated SPOIs. Each 56 Kbps transmission path shall appear as a DS-0 channel within the DS-1 interface.

16. Signaling Transfer Points (STPs)

16.1 Definition:

Signaling Transfer Points ("STP"s) provide functionality that enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer points.

16.2 Technical Requirements

16.2.1 STPs shall provide signaling access to all other Network Elements connected to the Qwest SS7 network. These include:

- 16.2.1.1 Qwest Local Switching or Tandem Switching;
 - 16.2.1.2 Qwest Service Control Points/DataBases connected to or resident on service control points;
 - 16.2.1.3 Third-party local or tandem switching systems connected to the Qwest signaling network; and
 - 16.2.1.4 Third-party-provided STPs connected to the Qwest signaling network.
- 16.2.2 The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to Qwest's SS7 network. This includes the use of Qwest's SS7 network to convey messages which neither originate nor terminate at a signaling end point directly connected to the Qwest SS7 network (i.e., transit messages). When the Qwest SS7 network is used to convey transit messages, there shall be no alteration of the Integrated Services Digital Network User Part ("ISDNUP") or Transaction Capabilities Application Part ("TCAP") user data that constitutes the content of the message.
- 16.2.3 If a Qwest tandem switch routes traffic, based on dialed or translated digits, on SS7 trunks between a CLEC local switch and third party local switch, Qwest's SS7 network shall convey the TCAP messages necessary to provide Call Management features (automatic callback, automatic recall, and screening list editing) between the CLEC local STPs and the STPs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to Qwest's STPs.
- 16.2.4 STPs shall provide all functions of the MTP as specified in ANSI T1.111 (Reference 12.5.2). This includes:
- 16.2.4.1 Signaling Data Link functions, as specified in ANSI T1.111.2;
 - 16.2.4.2 Signaling Link functions, as specified in ANSI T1.111.3; and
 - 16.2.4.3 Signaling Network Management functions, as specified in ANSI T1.111.4.
- 16.2.5 STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation ("GTT") and SCCP Management procedures, as specified in ANSI T1.112.4.
- 16.2.6 In cases where the destination signaling point is either a Qwest local or tandem switching system or data base, or is a CLEC or third party local or tandem switching system directly connected to Qwest's SS7 network, Qwest STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPs in an SS7 network connected with the Qwest SS7 network, and shall not perform SCCP Subsystem Management of the destination.

16.2.7 STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118, when this capability becomes available on Qwest STPs.

16.2.8 STPs shall provide all functions of the OMAP commonly provided by STPs, as specified in the reference in Section 16.5.6. This includes:

16.2.8.1 MTP Routing Verification Test ("MRVT"); and,

16.2.8.2 SCCP Routing Verification Test ("SRVT").

16.2.9 In cases where the destination signaling point is either a Qwest local or tandem switching system or database, or is a CLEC or third party local or tandem switching system directly connected to the Qwest SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPs in an SS7 network connected with the Qwest SS7 network. This requirement shall be superseded by the specifications for inter-network MRVT and SRVT if and when these become approved ANSI standards and available capabilities of Qwest STPs.

16.2.10 STPs shall be equal to or better than the following performance requirements:

16.2.10.1 MTP Performance, as specified in ANSI T1.111.6; and

16.2.10.2 SCCP Performance, as specified in ANSI T1.112.5.

16.3 Interface Requirements

16.3.1 Qwest shall provide the following STPs options to connect CLEC or CLEC-designated local switching systems or STPs to the Qwest SS7 network:

16.3.1.1 An A-link interface from CLEC local switching systems.

16.3.2 Each type of interface shall be provided by one or more sets (layers) of signaling links, as follows:

16.3.2.1 An A-link layer shall consist of two (2) links.

16.3.3 The Signaling Point of Interconnection ("SPOI") for each link shall be located at a cross-connect element, such as a DSX-1, in the central office where the Qwest STPs are located. There shall be a DS-1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS-0 channel within the DS-1 or higher rate interface.

Qwest shall offer higher rate DS-1 signaling for interconnecting CLEC local switching systems or STPs with Qwest STPs as soon as these become approved ANSI standards and available capabilities in Qwest's network.

16.3.4 Qwest shall provide MTP and SCCP protocol interfaces that shall conform to all relevant sections in the following specifications:

16.3.4.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and

16.3.4.2 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

16.4 Message Screening

16.4.1 Qwest shall set message screening parameters in order to accept messages from CLEC local or tandem switching systems destined to any signaling point in the Qwest SS7 network with which the CLEC switching system has a signaling relation.

16.4.2 Qwest shall set message screening parameters in order to accept messages from CLEC local or tandem switching systems destined to any signaling point or network interconnected to the Qwest SS7 network with which the CLEC switching system has a signaling relation.

16.4.3 Qwest shall set message screening parameters in order to accept messages destined to a CLEC local or tandem switching system from any signaling point or network interconnected to the Qwest SS7 network with which the CLEC switching system has a signaling relation.

16.4.4 Qwest shall set message screening parameters in order to accept and send messages destined to a CLEC SCP from any signaling point or network interconnected to the Qwest SS7 network with which the CLEC SCP has a signaling relation.

16.5 STP Requirements

16.5.1 Subject to the provisions of Sections 1.3.1 and 1.3.2 of Part A of this Agreement, STPs shall be equal to or better than all of the requirements for STPs set forth in the following technical references:

16.5.2 ANSI T1.111-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP);

16.5.3 ANSI T1.111A-1994 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement;

16.5.4 ANSI T1.112-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP);

- 16.5.5 ANSI T1.115-1990 American National Standard for Telecommunications- Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks;
- 16.5.6 ANSI T1.116-1990 American National Standard for Telecommunications- Signaling System Number 7 (SS7) - Operations, Maintenance and Administration Part (OMAP);
- 16.5.7 ANSI T1.118-1992 American National Standard for Telecommunications- Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI);
- 16.5.8 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP); and
- 16.5.9 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

17. Service Control Points/Databases

17.1 Definition:

- 17.1.1 Databases are the Network Elements that provide the functionality for storage of, access to, and manipulation of information required to offer a particular service and/or capability. Databases include, but are not limited to: Number Portability, LIDB, Toll Free Number Database, Automatic Location Identification/Data Management System and AIN.
- 17.1.2 A Service Control Point ("SCP") is a specific type of Database Network Element functionality deployed in a Signaling System 7 ("SS7") network that executes service application logic in response to SS7 queries sent to it by a switching system also connected to the SS7 network. SCPs also provide operational interfaces to allow for provisioning, administration and maintenance of subscriber data and service application data (e.g., a toll free database stores subscriber record data that provides information necessary to route toll free calls).

17.2 Technical Requirements for SCPs/Databases

Requirements for SCPs/Databases within this section address storage of information, access to information (e.g., signaling protocols and response times), and administration of information (e.g., provisioning, administration, and maintenance). All SCPs/Databases shall be provided to CLEC in accordance with the following requirements, except where such a requirement is superseded by specific requirements set forth in Subparagraphs 17.3 through 17.7 of this Attachment:

- 17.2.1 Qwest shall provide interconnection to SCPs through the Qwest designated STPs using SS7 network and protocols, as specified in Section 16 of this Attachment, with TCAP as the application layer protocol.

- 17.2.2 Regional SCP pairs shall be available pursuant to applicable technical reference documents.
- 17.2.3 Qwest shall provide to CLEC database provisioning consistent with the provisioning requirements of this Agreement (e.g., data required, edits, acknowledgments, data format and transmission medium and notification of order completion).
- 17.2.4 The operational interface provided by Qwest shall complete Database transactions (i.e., add, modify, delete) for CLEC subscriber records stored in Qwest databases at parity with which Qwest provisions its own subscriber records.
- 17.2.5 Qwest shall provide Database maintenance consistent with the maintenance requirements as specified in this Agreement (e.g., notification of Qwest network affecting events, testing, dispatch schedule and measurement and exception reports).
- 17.2.6 When and where available, Qwest shall provide billing and recording information to track Database usage consistent with Connectivity Billing and recording requirements as specified in this Agreement (e.g., recorded message format and content, timeliness of feed, data format and transmission medium).
- 17.2.7 Qwest shall provide SCPs/Databases in accordance with the physical security requirements specified in this Agreement.
- 17.2.8 Qwest shall provide SCPs/Databases in accordance with the logical security requirements specified in this Agreement.

17.3 Number Portability Database

17.3.1 Definition:

The Number Portability ("NP") Database supplies routing numbers for calls involving numbers that have been ported from one local service provider to another. NP database functionality shall also include Global Title Translations ("GTT") for calls involving ported numbers even if Qwest provides GTT functionality in another Network Element. Qwest shall provide the NP database in accordance with industry standards which shall supersede the following as needed.

17.3.2 Requirements

- 17.3.2.1 Qwest shall make Qwest NP database available for CLEC switches to query to obtain the appropriate routing number on calls to ported numbers or the industry specified indication that the number is not ported for non-portable numbers in NPA-NXXs that are opened to portability. The specified indication will also be provided when the NPA-NXX is not open to portability.

- 17.3.2.2 Query responses shall provide such additional information (e.g., Service Provider identification) as may be specified in the NP implementation in the relevant regulatory jurisdiction.
- 17.3.2.3 Qwest shall complete CLASS or LIDB queries routed to the Qwest network by CLEC switches and return the appropriate response to the querying source.
- 17.3.2.4 The NP database shall provide such other functionality as has been specified in the regulatory jurisdiction in which portability has been implemented.
- 17.3.2.5 Unavailability of the NP database query and GTT applications shall not exceed four (4) minutes per year.
- 17.3.2.6 The Qwest NP database shall respond to a round trip query within 500 milliseconds or as amended by industry standards.

17.3.3 Interface Requirements

Qwest shall interconnect the signaling interface between the CLEC or other local switch and the NP Database using the TCAP protocol as specified in the technical references in this Agreement, together with the signaling network interface as specified in the technical references in this Agreement, and such further requirements (e.g., AIN or IN protocols) as may be specified by regulatory or other bodies responsible for implementation of number portability.

17.4 Line Information Database (LIDB)

This Section 17.4 defines and sets forth additional requirements for the Line Information Database.

17.4.1 Definition:

The Line Information Database ("LIDB") is a transaction-oriented database accessible through Common Channel Signaling ("CCS") networks. It contains records associated with subscriber Line Numbers and Special Billing Numbers (in accordance with the requirements in the technical reference in Section 17.6.5). LIDB accepts queries from other Network Elements, or CLEC's network, and provides appropriate responses. The query originator need not be the owner of LIDB data. LIDB queries include functions, such as screening billed numbers, that provide the ability to accept Collect or Third Number Billing calls and validation of Telephone Line Number based non-proprietary calling cards. The interface for the LIDB functionality is the interface between the Qwest CCS network and other CCS networks. LIDB also interfaces to administrative systems. The administrative system interface provides work centers with an interface to LIDB for functions such as provisioning, auditing of data, access to LIDB measurements and reports.

17.4.2 Technical Requirements

- 17.4.2.1 Qwest shall enable CLEC to store in Qwest's LIDB any line number or special billing number. CLEC will provide Qwest a non-binding LIDB forecast. Prior to the availability of permanent NP, Qwest shall enable CLEC to store in Qwest's LIDB any subscriber Line Number or Special Billing Number record for CLEC resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5, whether ported or not, for which the NPA-NXX or NXX-0/1XX Group is supported by that LIDB.
- 17.4.2.2 Prior to the availability of permanent NP, Qwest shall enable CLEC to store in Qwest's LIDB any subscriber Line Number or Special Billing Number record for CLEC resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5, whether ported or not, and NPA-NXX and NXX-0/1XX Group Records, belonging to an NPA-NXX or NXX-0/1 XX owned by CLEC.
- 17.4.2.3 Subsequent to the availability of permanent NP, Qwest shall enable CLEC to store in Qwest's LIDB any subscriber Line Number or Special Billing Number record for CLEC resale, unbundled Network Elements and facility based customers, in accordance with the technical reference in Section 17.6.5, whether ported or not, regardless of the number's NPA-NXX or NXX-0/1XX.
- 17.4.2.4 Qwest shall perform the following LIDB functions (i.e., processing of the following query types as defined in the technical reference in Section 17.6.5) for CLEC's subscriber records in LIDB:
- 17.4.2.4.1 Billed Number Screening (provides information such as whether the Billed Number may accept Collect or Third Number Billing calls);
 - 17.4.2.4.2 Calling Card Validation; and
 - 17.4.2.4.3 Originating Line Number Screening (OLNS), when available.
- 17.4.2.5 Qwest shall process CLEC's subscriber records in LIDB at least at parity with Qwest subscriber records, with respect to other LIDB functions (as defined in the technical reference in Section 17.6). Qwest shall indicate to CLEC what additional functions, if any, are performed by LIDB in its network. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall develop an interim procedure to process CLEC subscriber records.
- 17.4.2.6 Within two (2) weeks after a request by CLEC, Qwest shall provide CLEC with a list of the subscriber data items which CLEC would have to provide in order to support each required LIDB function. The list shall indicate which data items are essential to LIDB function, and which are required only to support certain services. For each data item, the list shall show the

data formats, the acceptable values of the data item and the meaning of those values.

- 17.4.2.7 Qwest shall provide LIDB performance in accordance with section 17.6.5.
- 17.4.2.8 Qwest shall provide CLEC with the capability to provision (e.g., to add, update, and delete) NPA-NXX and NXX-0/IXX Group Records, and Line Number and Special Billing Number Records, associated with CLEC subscribers, directly into Qwest's LIDB provisioning process. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.
- 17.4.2.9 Unless directed otherwise by CLEC, in the event end user subscribers change their local service provider to CLEC, Qwest shall maintain subscriber data (for line numbers, card numbers, and for any other types of data maintained in LIDB) so that such subscribers shall not experience any interruption of service due to the lack of such maintenance of subscriber data.
- 17.4.2.10 All additions, updates and deletions of CLEC data to the LIDB shall be made solely at the direction of CLEC.
- 17.4.2.11 Qwest shall provide priority updates to LIDB for CLEC data upon CLEC's request (e.g., to support fraud protection).
- 17.4.2.12 When available, Qwest shall provide CLEC the capability to directly obtain, through an electronic interface, reports of all CLEC data in LIDB. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.
- 17.4.2.13 [Intentionally left blank for numbering consistency]
- 17.4.2.14 Qwest shall perform backup and recovery of all of CLEC's data in LIDB as frequently as Qwest performs backup and recovery for itself and any other Person, including sending to LIDB all changes made since the date of the most recent backup copy. Backup will be performed weekly. When needed, recovery will take place within twenty-four (24) hours.
- 17.4.2.15 Qwest shall provide to CLEC access to LIDB measurements and reports at least at parity with the capability Qwest has for its own subscriber records and that Qwest provides to any other party. Such access shall be electronic. Within ninety (90) days after the Effective Date of this Agreement, the Parties shall establish an interim process to meet the requirements of this Section.
- 17.4.2.16 Qwest shall provide CLEC with LIDB reports of data which are missing or contain errors, as well as any misroute errors, within the same time period as Qwest provides such reports to itself. Within ninety (90) days after the

Effective Date of this Agreement, the Parties shall establish a process to meet the requirements of this Section.

17.4.2.17 Qwest shall prevent any access to or use of CLEC data in LIDB by Qwest personnel or by any other party not authorized in writing by CLEC.

17.4.2.18 If and when technically feasible, Qwest shall provide CLEC performance of the LIDB Data Screening function, which allows a LIDB to completely or partially deny specific query originators access to LIDB data owned by specific data owners (in accordance with the technical reference in Section 17.6.5) for subscriber data that is part of an NPA-NXX or NXX-0/IXX wholly or partially owned by CLEC at least at parity with Qwest subscriber data. Qwest shall obtain from CLEC the screening information associated with LIDB Data Screening of CLEC data in accordance with this requirement.

17.4.2.18.1 The Parties agree to investigate technical feasibility of variable LIDB database screening to accomplish 17.4.2.18 above.

17.4.2.19 Qwest shall accept queries to LIDB associated with CLEC subscriber records, and shall return responses in accordance with the requirements of this Section 17.

17.4.3 Interface Requirements

Qwest shall offer LIDB in accordance with the requirements of this Section 17.4.3.

17.4.3.1 The interface to LIDB shall be in accordance with the technical reference in Section 17.6.3.

17.4.3.2 The CCS interface to LIDB shall be the standard interface described in Section 17.6.3.

17.4.3.3 The LIDB Database interpretation of the ANSI-TCAP messages shall comply with the technical reference in Section 17.6.4. Global Title Translation shall be maintained in the signaling network in order to support signaling network routing to the LIDB.

17.5 Toll Free Number Database

The Toll Free Number Database is an SCP that provides functionality necessary for toll free (e.g., 800 and 888) number services by providing routing information and additional vertical features during call set-up in response to queries from SSPs. This Section 17.5 supplements the requirements of Section 17.2 and 17.7. Qwest shall provide the Toll Free Number Database in accordance with the following subsections.:

17.5.1 Technical Requirements

17.5.1.1 Qwest shall make the Qwest Toll Free Number Database available, through its STPs, for CLEC to query from CLEC's designated switch including Qwest unbundled Local Switching.

17.5.1.2 The Toll Free Number Database shall return carrier identification and, where applicable, the queried toll free number, translated numbers and instructions as it would in response to a query from a Qwest switch.

17.5.2 Interface Requirements

The signaling interface between the CLEC or other local switch and the Toll-Free Number Database shall use the TCAP protocol as specified in the technical reference in Section 17.6.1, together with the signaling network interface as specified in the technical references in Sections 17.6.2 and 17.6.6.

17.6 SCPs/Databases shall be at least equal to all of the requirements for SCPs/Databases set forth in the following technical references:

17.6.1 GR-246-CORE, Bell Communications Research Specification of Signaling System Number 7, Issue 1 (Bellcore, December 199X);

17.6.2 GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP) (Bellcore, March 1994);

17.6.3 GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service 6, Issue 1, Rev. 1 (Bellcore, October 1995);

17.6.4 GR-1149-CORE, OSSGR Section 10: System Interfaces, Issue 1 (Bellcore, October 1995) (Replaces TR-NWT-001149);

17.6.5 GR-1158-CORE, OSSGR Section 22.3: Line Information Database 6, Issue (Bellcore, October 1995); and

17.6.6 GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service (Bellcore, May 1995).

17.7 Advanced Intelligent Network ("AIN") Access, Service Creation Environment and Service Management System ("SCE/SMS") Advanced Intelligent Network Access

17.7.1 Qwest shall provide mediated access to all Qwest service applications, current or future (if technically feasible), resident in Qwest's SCP through Qwest's STPs. Such access may be from CLEC's switch or Qwest's unbundled local switch.

17.7.2 SCE/SMS AIN Access shall provide CLEC the ability to create service applications in the Qwest SCE and deploy those applications via the Qwest SMS to the Qwest SCP. This interconnection arrangement shall provide CLEC access to the Qwest

development environment and administrative system in a manner at least at parity with Qwest's ability to deliver its own AIN-based services. SCE AIN Access is the development of service applications within the Qwest Service Creation Environment capability. SMS AIN Access is the provisioning of service applications via the Qwest Service Management System capability. AIN trigger provisioning will be accomplished through the Qwest local unbundled switching.

- 17.7.3 Services Available. Qwest shall make SCE hardware, software, testing and technical support (e.g., technical contacts, system administrator) resources available to CLEC. Scheduling of SCE resources shall allow CLEC at least equal priority to Qwest.
- 17.7.4 Multi-user Access. The Qwest SCE/SMS shall allow for multi-user access with proper source code management and other logical security functions.
- 17.7.5 Partitioning. When available, the Qwest SCP shall partition and protect CLEC service logic and data from unauthorized SMS capability and SCE capability access, execution or other types of compromise.
- 17.7.6 Training and Documentation. Qwest shall provide training and documentation for CLEC development staff only in cases in which such training or documentation is not reasonably available from another source. If training or documentation is required in accordance with this Section, it will be provided in a manner at least at parity with that provided by Qwest to its development staff. Training will be conducted at a mutually agreed upon location.
- 17.7.7 Access Environment. When CLEC selects SCE/SMS AIN Access, Qwest shall provide for a secure, controlled access environment on-site. When available, CLEC may request mutually agreed upon remote data connections (e.g., dial up, LAN, WAN).
- 17.7.8 Data Exchange. When CLEC selects SMS AIN Access, Qwest shall allow CLEC to download data forms and/or tables to the Qwest SCP, via the Qwest SMS capability, in the same fashion as Qwest downloads such forms and/or tables for itself.
- 17.7.9 Certification Testing. Certification testing is typically a two step process that includes an off-line unit test followed by an on-line controlled introduction testing into one of each of the Qwest switch types capable of supporting the service. Services created by CLEC will require certification testing by Qwest before the services can be provisioned in the network. The scheduling of Qwest certification testing resources for new CLEC services will be jointly coordinated and prioritized between Qwest and CLEC. CLEC testing requirements will be given equal priority with both Qwest and other provider's requirements. In most circumstances, such testing will be completed within sixty (60) days from the date the application is submitted by CLEC to Qwest for certification. In circumstances involving complex applications requiring additional time for testing, Qwest may request additional time and CLEC will not unreasonably withhold approval of such request. The certification testing

procedures described in this Section may be augmented as mutually agreed to by the Parties.

17.7.10 Access Standard. SCPs/Databases shall offer SCE/SMS AIN Access in accordance with the requirements of GR-1280-CORE, AIN Service Control Point (SCP) Generic Requirements.

17.8 [Intentionally left blank for numbering consistency]

17.9 CLEC will provide to Qwest timely non-binding forecasts of SS7 call transactions, link requirements, database query volumes, etc., as needed for sizing the individual network capabilities that CLEC will utilize under the terms of this Agreement.

17.10 CCS Service includes:

17.10.1 Entrance Facility - The entrance facility connects CLEC's signaling point of interface with the Qwest Serving Wire Center ("SWC").

17.10.2 Direct Link Transport ("DLT") - The DLT connects the CLEC SWC to the Qwest STP.

17.10.3 STP Port - The STP port provides the switching function at the STP. One (1) STP port is required for each DLT link. The port provides access to the SCP.

17.11 Advanced Intelligent Network ("AIN") triggers will be provided only to access Qwest databases. Access to AIN functions is available only through the STP. If CLEC requires other access, it will submit a Bona Fide Request. **If the unbundling of AIN triggers becomes technically feasible without unreasonable harm to the network, Qwest will be required to provide that element to CLEC at CLEC's expense.¹¹**

18. Additional Requirements

This Section 18 of Attachment 3 sets forth the additional requirements for unbundled Network Elements which Qwest agrees to offer to CLEC under this Agreement.

18.1 Cooperative Testing

18.1.1 Definition:

Cooperative Testing means that Qwest shall cooperate with CLEC upon request or as needed to (a) ensure that the Network Elements and Ancillary Functions and additional requirements being provided to CLEC by Qwest are in compliance with the requirements of this Agreement, (b) test the overall functionality of various Network Elements and Ancillary Functions provided by Qwest to CLEC in combination with each other or in combination with other equipment and facilities

¹¹ MCI Order, Issue 9b, p. 7.

provided by CLEC or third parties, and (c) ensure that all operational interfaces and processes are in place and functioning properly and efficiently for the provisioning and maintenance of Network Elements and Ancillary Functions and so that all appropriate billing data can be provided to CLEC.

18.1.2 Requirements

Within forty-five (45) days of the Effective Date of this Agreement, CLEC and Qwest will agree upon a process to resolve technical issues relating to interconnection of CLEC's network to Qwest's network and Network Elements and Ancillary Functions.

The agreed upon process shall include procedures for escalating disputes and unresolved issues up through higher levels of each Party's management. If CLEC and Qwest do not reach agreement on such a process within the 45-day time period, any issues that have not been resolved by the Parties with respect to such process shall be submitted to the dispute resolution procedures set forth in Part A of this Agreement unless both Parties agree to extend the time to reach agreement on such issues.

18.1.2.1 Qwest shall provide CLEC access for testing at any interface between a Qwest Network Element or Combinations and CLEC equipment or facilities. Such test access shall be sufficient to ensure that the applicable requirements can be tested by CLEC. This access shall be available seven (7) days per week, twenty-four (24) hours per day.

18.1.2.2 CLEC may test any interfaces, Network Elements or Ancillary Functions and additional requirements provided by Qwest to CLEC pursuant to this Agreement.

18.1.2.3 Qwest shall provide engineering data as requested by CLEC for the loop components as set forth in this Attachment which CLEC may desire to test. Such data shall include equipment engineering and cable specifications, signaling and transmission path data.

18.1.2.4 The Parties shall establish a process to provide engineering/office support information on unbundled Network Elements (e.g., central office layout and design records and drawings, system engineering and other applicable documentation) pertaining to a Network Element or Ancillary Function or the underlying equipment that is then providing a Network Element or Ancillary Function to CLEC.

18.1.2.5 Upon request from CLEC, Qwest shall provide to CLEC all applicable test results from Qwest testing activities on a Network Element or Ancillary Function or additional requirement or the underlying equipment providing a Network Element or Ancillary Function or additional requirements. CLEC may review such test results and may notify Qwest of any detected deficiencies.

18.1.2.6 Qwest shall temporarily provision CLEC designated Local Switching features for testing. Within sixty (60) days of the Effective Date of this Agreement,

CLEC and Qwest shall mutually agree on the procedures to be established between Qwest and CLEC to expedite such provisioning processes for feature testing.

18.1.2.7 Upon CLEC's request, Qwest shall make available technical support to meet with CLEC representatives to provide required support for Cooperative Testing. Qwest shall define the process to gain access to such technical support.

18.1.2.8 Dedicated Transport and Loop Feeder may experience alarm conditions due to in-progress tests. Qwest shall notify CLEC upon removal of such facilities from service.

18.1.2.9 Qwest shall exercise its best efforts to notify CLEC prior to conducting tests or maintenance procedures on Network Elements or Ancillary Functions or on the underlying equipment that is then providing a Network Element or Ancillary Function, that will likely cause a service interruption or degradation of service.

18.1.2.10 Qwest shall provide a single point of contact to CLEC that is available seven (7) days per week, twenty-four (24) hours per day for trouble status, sectionalization, resolution, escalation, and closure. Such staff shall be adequately skilled to allow expeditious problem resolution.

18.1.2.11 Qwest shall make available to CLEC access to 105 responders, 100-type test lines, or 102-type test lines associated with any circuits under test.

18.1.2.12 CLEC and Qwest shall complete Cooperative Testing in accordance with the procedures set forth in Attachment 5.

18.1.2.13 Qwest shall participate in Cooperative Testing requested by CLEC whenever it is deemed necessary by CLEC to insure service performance, reliability and subscriber serviceability.

18.1.2.14 CLEC may accept or reject the Network Element ordered by CLEC if, upon completion of cooperative acceptance testing, the tested Network Element does not meet the requirements stated herein.

18.2 Performance

18.2.1 Scope

This section addresses performance requirements for Network Elements and Ancillary Functions to provide local service..

18.2.1.2 Qwest shall work cooperatively with CLEC to determine appropriate performance allocations across Network Elements.

- 18.2.2 CLEC may request real-time, remote data access to performance monitoring and alarm data on events affecting (or potentially affecting) CLEC's traffic. CLEC shall specify the performance to be monitored and alarm data to be collected. To the extent the above is not available, CLEC will use the Bona Fide Request process to gain such capability.
- 18.2.3 Subject to the provisions of Sections 1.3.1 and 1.3.2 of Part A of this Agreement, Qwest shall provide performance at least equal to the requirements set forth in the following technical references:

18.2.3.1 Bell Communications Research, Inc. Documents

18.2.3.1.1 FR-64, LATA Switching Systems Generic Requirements (LSSGR). This document contains 117 Technical References and Generic Requirements. Sections provide the requirements for local switching systems (also referred to as end offices) that serve subscribers' lines. Some modules of the LSSGR are also referenced separately in this document.

18.2.3.1.2 TR-NWT-000499, Issue 5, Rev 1, April 1992, Transport Systems Generic Requirements (TSGR): Common Requirements.

18.2.3.1.3 TR-NWT-000418, Issue 2, December 1992, Generic Reliability Assurance Requirements For Fiber Optic Transport Systems.

18.2.3.1.4 TR-NWT-000057, Issue 2, January 1993, Functional Criteria for Digital Loop Carriers Systems.

18.2.3.1.5 TR-NWT-000507, Issue 5, December 1993, LSSGR - Transmission, Section 7.

18.2.3.1.6 GR-303-CORE, Issue 1, September 1995, Integrated Digital Loop Carrier System Generic Requirements, Objectives, and Interface.

18.2.3.1.7 GR-334-CORE, Issue 1, June 1994, Switched Access Service: Transmission Parameter Limits and Interface Combinations.

18.2.3.1.8 TR-NWT-000335, Issue 3, May 1993, Voice Grade Special Access Services - Transmission Parameter Limits and Interface Combinations.

18.2.3.1.9 TR-TSY-000529, Issue 2, July 1987, Public Safety - LSSGR.

18.2.3.1.10 GR-1158-CORE, Issue 2, October 1995, OSSGR Section 22.3: Line Information Database.

18.2.3.1.11 TR-TSY-000511, Issue 2, July 1987, Service Standards, a Module (Section 11) of LATA Switching Systems Generic Requirements (LSSGR, FR-NWT-000064).

18.2.3.1.12 TR-NWT-000393, January 1991, Generic Requirements for ISDN Basic Access Digital Subscriber Lines.

18.2.3.1.13 TR-NWT-000909, December 1991, Generic Requirements and Objectives for Fiber In The Loop Systems.

18.2.3.1.14 TR-NWT-000505, Issue 3, May 1991, LSSGR Section 5, Call Processing.

18.2.3.1.15 FR-NWT-000271, 1993, Operator Services Systems Generic Requirements (OSSGR).

18.2.3.1.16 TR-NWT-001156, Issue 2, July 1993, OSSGR Operator Services Systems Generic Requirements, Section 21, Operator Subsystem.

18.2.3.1.17 SR-TSY-001 171, Issue 1, January 1989, Methods and Procedures for System Reliability Analysis.

18.2.3.1.18 Bellcore Telecommunications Transmission Engineering, 3rd Ed, 1990.

18.2.3.2 ANSI Standards

18.2.3.2.1 ANSI T1.512-1994, Network Performance - Point-to-Point Voice-Grade Special Access Network Voiceband Data Transmission Objectives.

18.2.3.2.2 ANSI T1.506-1990, Network Performance - Transmission Specifications for Switched Exchange Access Network.

18.2.3.2.4 ANSI T1.508-1992, Telecommunications - Network Performance - Loss Plan for Evolving Digital Networks. Also supplement T1.508a-1993.

18.2.3.2.5 ANSI T1.101-1994, Digital Synchronization Network Plan.

18.2.3.3 TIA/EIA Standards

18.2.3.3.1 Requirements not specifically addressed here shall be found in the documents listed in Electronic Industries Association/Telecommunications Industries Association Standards and Engineering Publications.

18.2.3.3.2 TIA/EIA TSB-37A, Telephone Network Transmission Model for Evaluating Modem Performance.

18.2.3.3.3 TIA/EIA TSB-38, Test Procedure for Evaluation of 2-wire 4 kHz Voiceband Duplex Modems.

18.2.3.4 IEEE Standards

18.2.3.4.1 IEEE Standard 743-1984, IEEE Standard Methods and Equipment for Measuring Transmission Characteristics of Analog Voice Frequency Circuits.

18.2.3.4.2 ANSI/IEEE Standard 820-1984, Telephone Loop Performance Characteristics.

18.2.4 Services and Capabilities

18.2.4.1 All Network Elements shall provide performance sufficient, in combination with other Network Elements, to provide the following applications in accordance with the requirements of this Agreement:

18.2.4.1.1 all types of voice services;

18.2.4.1.2 all types of voice-band data modem connections up to and including 28.8 Kbps V-34;

18.2.4.1.3 all types of facsimile transmissions up to and including 14.4 Kbps group 3;

18.2.4.1.4 all CLASS/LASS features; and

18.2.4.1.5 all Operator Systems.

18.2.4.2 The following capabilities shall be provided as applicable:

18.2.4.2.1 ISDN BRI

18.2.4.2.2 ISDN PRI

18.2.4.2.3 Switched Digital Data

18.2.4.2.4 Non-Switched Digital Data

18.2.4.2.5 Any types of video applications a subscriber may order

18.2.4.2.6 Any Coin Services a subscriber may order

18.2.4.2.7 Frame Relay and ATM

18.2.4.2.8 Private Line Services

18.2.5 Specific Performance Requirements for Network Elements and Ancillary Functions

18.2.5.1 The following Sections set forth performance parameters for Network Elements and Ancillary Functions. Qwest shall provide performance equal to or better than all of the applicable requirements set forth in this Section. Unless otherwise noted, requirements and objectives are given in terms of specific limits.

18.2.5.2 Within ninety (90) days of the Effective Date of this Agreement, Qwest will analyze the following performance criteria with respect to the standards identified herein and document the Qwest deviations consistent with the processes outlined in Sections 1.3.1 and 1.3.2 in Part A of this Agreement.

18.2.5.3 Transmission path impairments may be classified as either analog or digital and will depend on the nature of the signal transmitted across the Network Element. Analog impairments are introduced on any analog portion of the Loop, typically between the NID portion of Loop Distribution and the analog to digital (A/D) conversion, and are usually correlated with the length of the physical plant. Digital impairments are introduced by A/D conversion and by interfaces between digital Network Elements. In addition, noise can be introduced by either analog transmission or the A/D conversion.

18.2.5.4 Loop Combination Architecture Constraints

18.2.5.4.1 The following constraints will limit not only the variety of Loop Combination architectures that may be considered, but also the architectures Qwest may consider to deliver any Ancillary Function or Network Element provided by USWC to CLEC unless otherwise specified by CLEC. These constraints apply to the entire path between the NID portion of Loop Distribution and the Qwest switch. Any exceptions to these restrictions shall be specifically requested or approved by CLEC in writing.

18.2.5.4.1.1 No more than one (1) pair of A-D conversion.

18.2.5.4.1.2 No more than one (1), 2-to-4-wire hybrid.

18.2.5.4.1.3 No voice compression.

18.2.5.4.1.4 No echo canceled or suppressers.

18.2.5.4.1.5 One (1) digital loss pad per PBX.

18.2.5.4.1.6 No digital gain.

18.2.5.4.1.6 No additional equipment that might significantly increase intermodulation distortion.

18.2.5.5 Transmission Impairments

18.2.5.5.1 Analog Impairments

18.2.5.5.1.1 Analog impairments are those introduced on portions of the end-to-end circuit on which communications signals are transmitted in analog format. These portions of the transmission path would typically be between NID and an A/D conversion, most commonly on the metallic loop. The performance on the analog portion of a circuit is typically inversely proportional to the length of that circuit.

18.2.5.5.1.2 Loss

18.2.5.5.1.2.1 Electrical loss is measured using a 1004 Hz test tone at zero (0.0) db at one milliwatt into a 900 ohm termination.

18.2.5.5.1.2.2 [Intentionally left blank for numbering consistency]

18.2.5.5.1.3 Idle Channel Circuit Noise

18.2.5.5.1.3.1 Idle channel circuit noise (C-message) is added by analog facilities, by the A/D conversion of signals, by digital processing equipment (e.g., echo cancelers, digital loss pads), robbed bit signaling, and errors on digital facilities.

18.2.5.5.1.4 Talker Echo

18.2.5.5.1.4.1 The primary source of echo is improper impedance-matching at the 2-to-4 wire hybrid in the Qwest network. The impact on subscriber perception is a function of both echo return loss and delay.

18.2.5.5.1.5 Listener Echo

18.2.5.5.1.5.1 Listener echo is a double reflection of a transmitted signal at two (2) different impedance mismatches in the end-to-end connection. While in extreme cases it can degrade voice transmission performance, listener echo is primarily an issue for voiceband data.

18.2.5.5.1.6 Propagation and Processing Delay

18.2.5.5.1.6.1 Propagation delay is the delay involved in transmitting information from one location to another. It is caused by processing delays of equipment in the network and delays associated with traveling across transmission facilities.

18.2.5.5.1.6.2 Qwest shall cooperate with CLEC to limit total service propagation and processing delay to levels at parity with those within the Qwest local network.

18.2.5.5.1.7 Signal-to-Noise Ratio

18.2.5.5.1.7.1 The Signal-to-Noise ratio (S/N) is a critical parameter in determining voiceband data performance. It is typically measured with a 1004 Hz tone.

18.2.5.5.1.8 C-Notched Noise

18.2.5.5.1.9 Attenuation Distortion

18.2.5.5.1.9.1 Attenuation distortion, also known as frequency distortion or gain slope, measures the variations in loss at different frequencies across the voice frequency spectrum (200 Hz - 3400 Hz). It is measured by subtracting the loss at 1004 Hz from the loss at the frequency of interest.

18.2.5.5.1.10 Envelope Delay Distortion

18.2.5.5.1.10.1 Envelope Delay Distortion ("EDD") measures the difference in transit time of signals at different frequencies. EDD is measured relative to the transit time of a 1704 Hz tone, and is given in microseconds. EDD is used as an approximation of the group delay of the channel.

18.2.5.5.1.11 Phase Jitter

18.2.5.5.1.11.1 Phase jitter measures the unwanted angular modulation of a signal. It is caused by noise or the actual modulation of the signal by another unwanted signal. It displaces the zero crossings of a signal. It is measured in terms of peak-to-peak deviations of a 1004 Hz tone from its nominal zero crossings, and in a particular frequency band (200-300 HZ and either 4-300 Hz or 2-300 Hz). Phase jitter impacts voiceband data performance and can make modems more susceptible to other impairments, including noise.

18.2.5.5.1.12 Amplitude Jitter

18.2.5.5.1.12.1 Amplitude jitter is any deviation of the peak value of a 1004 Hz signal from its nominal value. Excessive amounts can impair voiceband data performance. It is primarily caused by noise but can also be caused by phase jitter, gain hits, or single frequency interference.

18.2.5.5.1.13 Intermodulation Distortion

18.2.5.5.1.13.1 Intermodulation distortion ("IMD") measures non-linear distortions of a signal. It compares the power of harmonic tones to the

power of the transmitted tones. It is measured for both the second and third harmonics of the transmitted tones. IMD is caused by compression or clipping and can impair voiceband data performance.

18.2.5.5.1.14 Impulse Noise

18.2.5.5.1.14.1 Impulse noise is a sudden and large increase in noise on a channel for a short duration of time. Impulse noise is measured as a count of the number of times a noise threshold is exceeded during a given time period (typically 5 or 15 minutes). It is caused by protection switching, maintenance activities, electromechanical switching systems, digital transmission errors, and line coding mismatches. Impulse noise sounds like clicking noises or static on voice connections. Impulse noise impairs voiceband data performance.

18.2.5.5.1.15 Phase Hits

18.2.5.5.1.15.1 Phase hits are a sudden change in the phase of a signal lasting at least four (4) milliseconds. Phase hits are measured using a threshold that indicates how much the phase of the signal has changed with respect to its nominal phase. Phase hits are caused by protection switching and slips or other synchronization errors. Phase hits can impair voiceband data performance.

18.2.5.5.1.16 Gain Hits

18.2.5.5.1.16.1 Gain hits are sudden changes in the level of a signal that last at least four (4) milliseconds. Gain hits are measured against a threshold of typically 2-5 dB relative to the signal's nominal level. Gain hits are usually caused by protection switches and can impair voiceband data performance.

18.2.5.5.1.17 Dropouts

18.2.5.5.1.17.1 Dropouts are drops in the level of a signal of 12 dB or more for at least four (4) milliseconds. They are caused by protection switching events, radio fading, and conditions causing digital carrier systems to lose frame. Dropouts are critical for voiceband data performance but, if severe enough, will also affect voice quality.

18.2.5.5.1.18 Frequency Shift

18.2.5.5.1.18.1 Frequency shift measures any frequency changes that occur when a signal is transmitted across a channel. It is typically measured using a 1004 Hz tone. Frequency shift has very little impact on voice or voiceband data performance; however, round-trip frequency shifts can affect the ability of echo cancelers to remain converged.

18.2.5.5.1.19 Crosstalk

18.2.5.5.1.19.1 Crosstalk is the presence of signals from other telephone connections on a circuit. Crosstalk can be either intelligible, when speech from other connections can be heard and understood, or unintelligible. Crosstalk is caused by inter-channel interference on the transmission system. Crosstalk is difficult to measure: it requires correlating signals on different circuits or using human listeners to identify its presence. Trouble reports may be used to estimate the probability of crosstalk.

18.2.5.5.1.20 Clipping

18.2.5.5.1.20.1 Clipping occurs when part of a transmitted signal is dropped and does not reach the receiving portion on a connection. It can be caused by Digital Speech Interpolation ("DSI") equipment used in Digital Circuit Multiplication Systems ("DCMS") which increase the amount of traffic that transmission facilities carry, and by echo cancelers or echo suppressers.

18.2.5.5.1.21 Digital Impairments

18.2.5.5.1.21.1 Digital impairments occur in the signal wherever it is transmitted in digital format. These errors are usually introduced upon conversion of the signal from analog to digital, as well as at interfaces between digital components. While many digital impairments have little impact on subjective voice quality, they can impact data performance.

18.2.5.5.1.22 Signal Correlated Distortion

18.2.5.5.1.22.1 Signal correlated distortion ("SCD") is unwanted noise or distortion introduced into a signal through the conversion of a signal from analog to digital format or through digital processing that changes the transmitted signal. SCD affects performance when a signal is being transmitted. The primary sources of SCD are signal encoders, echo cancelers, digital loss pads, and robbed bit signaling. SCD affects both voice and data performance.

18.2.5.5.1.22.2 [Left Blank Intentionally]

18.2.5.5.1.23 Slips

18.2.5.5.1.23.1 Slips occur when a frame of digital data is either deleted or repeated because of differences in the clocks used to synchronize digital facilities. Slips sound like clicks or pops on voice calls and have major impact on data performance.

18.2.5.5.1.24 Digital Timing Jitter and Wander

18.2.5.5.1.24.1 Digital timing jitter is the unwanted phase modulation of digital signals at rates above 10 Hz. Wander is the unwanted phase modulation of digital signals at rates below 10 Hz. Digital timing jitter is caused by imperfections in the timing recovery process of regenerators and the stuffing synchronization process used by multiplexer/demultiplexers. Wander is caused by slowly varying changes in digital signal phase due to clock frequency offset and drift, changes in propagation delay of terrestrial facilities due to temperature changes and changes in the distance of satellites from the earth. These events have a major impact on data performance.

18.2.5.5.1.25 DS-1 Errored Seconds

18.2.5.5.1.25.1 An Errored Second ("ES") on a DS-1 facility is any second during which at least 1 bit is in error. The impact of an ES on performance depends on the number of errors that occur during a second. Typically, voice performance is not significantly impacted by ES but it can cause errors in data transmissions.

18.2.5.5.1.26 DS-1 Severely Errored Seconds

18.2.5.5.1.26.1 A severely Errored Second ("SES") is any second during which a DS-1 has an error rate exceeding 0.001. An SES can be caused by a loss of framing, a slip, or a protection switch. SESs have impacts on both voice and data performance. For voice, a SES will sound like a burst of noise or static. SESs that occur during a data transmission cause a significant burst of errors and can cause modems to retrain.

18.2.5.5.1.27 Short Failure Events

18.2.5.5.1.27.1 A Short Failure Event ("SFE") is a Loss of Frame ("LOF") event of less than two (2) minutes' duration. An LOF event is declared when, on detection of a Loss of Signal ("LOS") or Out-of-Frame ("OOF"), a rise-slope-type integration process starts that declares a LOF after 2.5 ± 0.5 sec. of continuous LOS or OOF. If the LOS or OOF is intermittent the integration process shall decay at a slope of 1/5 the rise slope during the period when the signal is normal. Thus, if the ratio of a LOS or OOF to a normal signal is greater than 1/2, a LOF will be declared. A LOS condition shall be declared when the Network Channel Terminating Equipment has determined that 175 ± 75 successive pulse positions with no pulses of either positive or negative polarity have occurred. An OOF condition shall be declared when either network equipment or digital terminal equipment detects errors in the framing pattern.

18.2.5.6 Service Availability and Reliability

Availability refers to the time period during which the service is up and usable for its intended purpose. Reliability refers to the probability that a task, once begun, will be successfully completed.

18.2.5.6.1 Blocked Calls

18.2.5.6.1.1 Blocking is the fraction of call origination attempts denied service during a stated measurement period. Blocking occurs because of competition for limited resources within the network.

18.2.5.6.2 Downtime

Downtime is the period of time a system is in a failed state.

18.2.5.6.3 Dial Tone Delay

18.2.5.6.3.1 Dial-Tone Delay is the time period between a subscriber off-hook and the receipt of dial tone from an originating end office. Dial-Tone Delay has a significant effect on subscriber opinion of service quality.

18.2.5.6.4 Dial Tone Removal

18.2.5.6.4.1 Dial tone removal is the time between recognition of the first address digit to the removal of dial tone on the line.

18.2.5.6.5 Post Dial Delay

18.2.5.6.5.1 Post Dial Delay ("PDD") is the amount of time a caller must wait after entering or dialing the last digit of a Destination Telephone Number ("DTN") before hearing a valid audible network response. The PDD for an end user is measured from the time the caller has pressed or dialed the last digit of a DTN until receipt of an audible network response.

18.2.5.6.5.2 The requirements given reflect an end-to-end CCS7 protocol for CLEC end users. Where a mixture of CCS7 and inband (MF) signaling protocols are employed, an increase in the PDD can be expected.

18.2.5.6.5.2.1 PDD 1 - A - Intra LSO

18.2.5.6.5.2.1.1 Intra-LSO calls do not employ external signaling protocols. The PDD for intra-LSO calls flows are dependent upon the processor cycle time and traffic load conditions. This PDD is assumed to be between subscribers on the same LSO, between the Remote Switch Modules ("RSM") on the same host, or between an RSM and host subscribers.

18.2.5.6.5.2.2 PDD1 - B - LSO to Another Local LSO

18.2.5.6.5.2.3 PDD1 - C - CLEC LSO to Other LSO

18.2.5.6.5.2.3.1 Calls from a CLEC LSO to other LSOs are dependent upon the interface agreements between CLEC and the LSO service provider and may employ CCS7, inband (MF) or a combination of both protocols.

18.2.5.6.5.2.3.2 [Intentionally left blank for numbering consistency]

18.2.5.6.5.2.3.2.1 Network Inter-Connect, CCS7 between CLEC and the LEC.

18.2.5.6.5.2.3.2.2 Inband Multifrequency ("MF") signaling protocols without a Qwest egress tandem in the connection.

18.2.5.6.5.2.3.2.3 Inband MF signaling protocols with a Qwest egress tandem in the connection.

18.2.5.6.5.2.3.2.3.1 Calls from a CLEC LSO to other LSOs outside the local service area are assumed to have multiple STPs for 1+ traffic in the access and PSTN portion of the connection. The egress from the PSTN for 1+ traffic is again dependent upon the interface Agreements in that service area and may consist of CCS7 or inband MF protocols.

18.2.5.6.5.2.4 Impact of Number Portability (NP)

18.2.5.6.5.2.5 Custom Local Area Subscriber Services (CLASS)

18.2.5.6.5.2.6 Partial Dial Timing

18.2.5.6.5.2.6.1 The interval between each information digit from a subscriber's line, until the LSO or switching system has determined that the digit string is incomplete.

18.2.5.7 Local Switching

18.2.5.8 Operator Systems

Operator System connections shall comply with the requirements for the Loop Combination, Local Switching, Operator Service, and Directory Assistance Service requirements.

18.2.5.9 Common Transport

Specific requirements for this Network Element or Ancillary Function are in the Common Transport Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between CLEC and Qwest consistent with sound engineering principles.

18.2.5.10 Dedicated Transport

Specific requirements for this Network Element are in the Dedicated Transport Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between CLEC and Qwest consistent with sound engineering principles.

18.2.5.11 Signaling Transfer Points

Specific requirements for this Network Element are in the Signaling Transfer Points Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between CLEC and Qwest.

18.2.5.12 Signaling Link Transport

Specific requirements for this Network Element are in the Signaling Link Transport Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between CLEC and Qwest consistent with sound engineering principles.

18.2.5.13 SCPs/Databases

The performance requirements for Databases (NP, LIDB, E911, etc.) vary depending on the Database and the applications it supports. Database-specific performance requirements are included in the Sections of this Attachment addressing individual Network Elements and in applicable Bellcore documents. In all cases, the query response time, availability, accuracy, updating capabilities, and other performance parameters shall at least be at parity with those services as provided by Qwest to itself.

18.2.5.14 Tandem Switching

Specific requirements for this Network Element are in the Tandem Switching Section of this Attachment. In all cases the performance of this Network Element shall meet the general requirements stated in "General Performance Requirements." Allocation of impairments shall be negotiated between CLEC and Qwest consistent with sound engineering principles.

18.2.6 Test and Verification

- 18.2.6.1 Qwest shall provide unbundled Network Elements to CLEC in such a way as to not unreasonably interfere with CLEC's ability to confirm acceptable performance of the Network Elements provided by Qwest to CLEC through the use of CLEC test equipment located in its collocated space.

- 18.2.6.2 At CLEC's request through the Bona Fide Request process, if not generally available, Qwest will provide access to the Network Element sufficient for CLEC to test the performance of that Network Element to CLEC's satisfaction.
- 18.2.6.3 At CLEC's request, Qwest will perform tests to confirm acceptable performance and provide CLEC with documentation of test procedures and results in conformance with Qwest's internal practices. Additional test procedures may be requested by CLEC through the Bona Fide Request process if not generally available.

18.3 Protection, Restoration, and Disaster Recovery

18.3.1 Scope:

This Section refers specifically to requirements on the use of redundant network equipment and facilities for protection, restoration, and disaster recovery.

18.4 Synchronization

18.4.1 Definition:

Synchronization is the function which keeps all digital equipment in a communications network operating at the same average frequency. With respect to digital transmission, information is coded into discrete pulses. When these pulses are transmitted through a digital communications network, all synchronous Network Elements are traceable to a stable and accurate timing source. Network synchronization is accomplished by timing all synchronous Network Elements in the network to a stratum 1 traceable source so that transmission from these network points have the same average line rate.

18.4.2 Technical Requirements

The following requirements are applicable to the case where Qwest provides synchronization to equipment that CLEC owns and operates within a Qwest location. In addition, these requirements apply to synchronous equipment that is owned by Qwest and is used to provide a Network Element to CLEC.

- 18.4.2.1 The synchronization of clocks within digital networks is divided into two parts: intra-building and inter-building. Within a building, a single clock is designated as the Building Integrated Timing Supply ("BITS"), which provides all of the DS-1 and DS-0 synchronization references required by other clocks in such building. This is referred to as intra-building synchronization. The BITS receives synchronization references from remotely located BITS such as a primary reference source. Synchronization of BITS between buildings is referred to as inter-building synchronization.

18.4.2.2 To implement a network synchronization plan, clocks within digital networks are divided into four stratum levels. All clocks in strata 2, 3, and 4 are synchronized to a stratum 1 clock, that is, they are traceable to a stratum 1 clock. A traceable reference is a reference that can be traced back through some number of clocks to a stratum 1 source. Clocks in different strata are distinguished by their free running accuracy or by their stability during trouble conditions such as the loss of all synchronization references.

18.4.2.2.1 Intra-Building

Within a building, there may be different kinds of equipment that require synchronization at the DS-1 and DS-0 rates. Synchronization at the DS-1 rate is accomplished by the frequency synchronizing presence of buffer stores at various DS-1 transmission interfaces. Synchronization at the DS-0 rate is accomplished by using a composite clock signal that phase synchronizes the clocks. Equipment requiring DS-0 synchronization frequently does not have adequate buffer storage to accommodate the phase variations among different equipment. Control of phase variations to an acceptable level is accomplished by externally timing all interconnecting DS-0 circuits to a single clock source and by limiting the interconnection of DS-0 equipment to less than 1,500 cable feet. Therefore, a BITS shall provide DS-1 and composite clock signals when the appropriate composite signal is a 64-kHz 5/8th duty cycle, return to zero with a bipolar violation every eighth pulse (B8RZ).

18.4.2.2.2 Inter-Building

Qwest shall provide inter-building synchronization at the DS-1 rate, and the BITS shall accept the primary and/or secondary synchronization links from BITS in other buildings where necessary. From hierarchical considerations, the BITS shall be the highest stratum clock within the building and Qwest shall provide operations capabilities. When available, such capability includes, but is not limited to, synchronization reference provisioning; synchronization reference status inquiries; timing mode status inquiries; and alarm conditions.

18.4.3 Synchronization Distribution Requirements

18.4.3.1 Central office BITS shall contain redundant clocks meeting or exceeding the requirements for a stratum 3 clock as specified in ANSI T1.101-1994 and ANSI T1.105.09 and Bellcore GR-NWT-001244 Clocks for the Synchronized Network: Common Genetic Criteria.

18.4.3.2 Central office BITS shall be powered by primary and backup power sources.

18.4.3.3 If both reference inputs to the BITS are interrupted or in a degraded mode (meaning off frequency greater than twice the minimum accuracy of the BITS, loss of frame, excessive bit errors, or in Alarm Indication Signal), then

the stratum clock in the BITS shall provide the necessary bridge in timing to allow the network to operate without a frame repetition or deletion (slip free) with better performance than specified in these technical references specified in 18.4.3.1.

18.4.3.4 DS-1s multiplexed into a SONET synchronous payload envelope within an STS-n (where "n" is defined in ANSI T1.105-1995) signal shall not be used as reference facilities for network synchronization.

18.4.3.5 The total number of Network Elements cascaded from the stratum 1 source shall be minimized.

18.4.3.6 A Network Element shall receive the synchronization reference signal only from another Network Element that contains a clock of equivalent or superior quality (stratum level).

18.4.3.7 Qwest shall select for synchronization those facilities shown to have the greatest degree of availability (absence of outages).

18.4.3.8 Where possible, all primary and secondary synchronization facilities shall be physically diverse (this means the maximum feasible physical separation of synchronization equipment and cabling).

18.4.3.9 No timing loops shall be formed in any combination of primary and secondary facilities.

18.4.3.10 Qwest shall continuously monitor the BITS for synchronization related failures.

18.4.3.11 Qwest shall continuously monitor all equipment transporting synchronization facilities for synchronization related failures.

18.4.3.12 For non-SONET equipment, Qwest shall provide synchronization facilities which, at a minimum, comply with the standards set forth in ANSI T1.101-1994.

18.4.3.13 For SONET equipment, Qwest shall provide synchronization facilities that have time deviation (TDEV) for integration times greater than 0.05 seconds and less than or equal to ten (10) seconds, that is less than or equal to 100 nanoseconds. TDEV, in nanoseconds, for integration times greater than ten (10) seconds and less than 1000 seconds, shall be less than 31.623 times the square-root of the integration time.

18.5 SS7 Network Interconnection

18.5.1 Definition:

SS7 Network Interconnection is the interconnection of CLEC local Signaling Transfer Point (STPs) with Qwest STPs. This interconnection provides connectivity

that enables the exchange of SS7 messages among Qwest switching systems and databases, CLEC local or tandem switching systems, and other third-party switching systems directly connected to the Qwest SS7 network.

18.5.2 Technical Requirements

18.5.2.1 SS7 Network Interconnection shall provide signaling connectivity to all components of the Qwest SS7 network through Qwest STPs. These include:

18.5.2.1.1 Qwest local or tandem switching systems;

18.5.2.1.2 Qwest databases; and

18.5.2.1.3 other third-party local or tandem switching systems.

18.5.2.2 The connectivity provided by SS7 Network Interconnection shall support the functions of Qwest switching systems and databases and CLEC or other third-party switching systems with A-link access to the Qwest SS7 network.

18.5.2.3 SS7 Network Interconnection shall provide transport for certain types of Transaction Capabilities Application Part ("TCAP") messages. If traffic is routed based on dialed or translated digits between a CLEC local switching system and a Qwest or other third-party local switching system, either directly or via a Qwest tandem switching system, then it is a requirement that the Qwest SS7 network convey via SS7 Network Interconnection the TCAP messages necessary to provide Call Management services (Automatic Callback, Automatic Recall, and Screening List Editing) between the CLEC local STPs and the Qwest or other third-party STPs.

18.5.2.4 When the capability to route messages based on Intermediate Signaling Network Identifier ("ISNI") is generally available on Qwest STPs, the Qwest SS7 Network shall also convey TCAP messages using SS7 Network Interconnection in similar circumstances where the Qwest switch routes traffic based on a Carrier Identification Code ("CIC").

18.5.2.5 SS7 Network Interconnection shall provide all functions of the MTP as specified in ANSI T1. 111. This includes:

18.5.2.5.1 Signaling Data Link functions, as specified in ANSI T1.111.2;

18.5.2.5.2 Signaling Link functions, as specified in ANSI T1.111.3; and

18.5.2.5.3 Signaling Network Management functions, as specified in ANSI T1.111.4.

- 18.5.2.6 SS7 Network Interconnection shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112.
- 18.5.2.7 Where the destination signaling point is a Qwest switching system or database, or is another third-party local or tandem switching system directly connected to the Qwest STPs (SS7 network), SS7 Network Interconnection shall include final GTT of messages to the destination and SCCP Subsystem Management of the destination.
- 18.5.2.8 Where the destination signaling point is a CLEC local or tandem switching system, SS7 Network Interconnection shall include intermediate GTT of messages to a gateway pair of CLEC local STPs, and shall not include SCCP Subsystem Management of the destination.
- 18.5.2.9 SS7 Network Interconnection shall provide all functions of the Integrated Services Digital Network User Part (ISDNUP), as specified in ANSI T1.113.
- 18.5.2.10 SS7 Network Interconnection shall provide all functions of the TCAP, as specified in ANSI T1.114.
- 18.5.2.11 If and when inter-network MTP Routing Verification Test (MRVT) and SCCP Routing Verification Test (SRVT) become approved ANSI standards and available capabilities of both Qwest and CLEC STPs, SS7 Network Interconnection shall provide these functions of the OMAP.
 - 18.5.2.11.1 The Parties shall develop a mutually agreed upon interim process for MRVT and SRVT within ninety (90) days of the Effective Date of this Agreement. Either Party shall be allowed to shut off MRVT/SRVT for preservation of network integrity.
- 18.5.2.12 SS7 Network Interconnection shall be equal to or better than the following performance requirements:
 - 18.5.2.12.1 MTP Performance, as specified in ANSI T1.111.6;
 - 18.5.2.12.2 SCCP Performance, as specified in ANSI T1.112.5; and
 - 18.5.2.12.3 ISDNUP Performance, as specified in ANSI T1.113.5.

18.5.3 Interface Requirements

- 18.5.3.1 Qwest shall offer the following SS7 Network Interconnection options to connect CLEC or CLEC-designated STPs to the Qwest STPs (SS7 network):
 - 18.5.3.1.1 D-link interface from CLEC STPs.

- 18.5.3.2 Each interface shall be provided by one or more sets (layers) of signaling links, as follows:
- 18.5.3.2.1 A D-link layer shall consist of four links.
- 18.5.3.3 The Signaling Point of Interconnection ("SPOI") for each link shall be located at a cross-connect element, (e.g., DSX-1) in the central office where the Qwest STPs are located. There shall be a DS-1 or higher rate transport interface at each of the SPOIs. Each signaling link shall appear as a DS-0 channel within the DS-1 or higher rate interface. Qwest shall offer higher rate DS-1 signaling links for interconnecting CLEC local switching systems or STPs with Qwest STPs as soon as these become approved ANSI standards and available capabilities of Qwest STPs.
- 18.5.3.3.1 In each LATA, there will be two (2) SPOIs. The requirement for two SPOIs is driven by the critical importance attached by the Parties to signaling link diversity.
- 18.5.3.3.2 Each Party will designate one (1) of the two (2) SPOIs in a reasonable and efficient location in the LATA. A SPOI can be any existing cross connect point in the LATA.
- 18.5.3.3.3 Each signaling link requires a port on each Party's STP.
- 18.5.3.4 Where available, the Qwest central office shall provide intraoffice diversity between the SPOIs and the Qwest STPs, so that no single failure of intraoffice facilities or equipment shall cause the failure of both D-links in a layer connecting to Qwest's STPs.
- 18.5.3.5 The protocol interface requirements for SS7 Network Interconnection include the MTP, ISDNUP, SCCP and TCAP. These protocol interfaces shall conform to the following specifications:
- 18.5.3.5.1 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP);
- 18.5.3.5.2 Bellcore GR-1428-CORE, CCS Network Interface Specification (CCSNIS) Supporting Toll Free Service;
- 18.5.3.5.3 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and
- 18.5.3.5.4 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

18.5.3.6 To the extent technically feasible, Qwest shall set message screening parameters to block accept messages from CLEC local or tandem switching systems destined to any signaling point in the Qwest SS7 network with which the CLEC switching system has a legitimate signaling relation.

18.5.4 SS7 Network Interconnection shall be equal to or better than all of the requirements for SS7 Network Interconnection set forth in the following technical references:

18.5.4.1 ANSI T1.110-1992 American National Standard Telecommunications Signaling System Number 7 (SS7) - General Information;

18.5.4.2 ANSI T1.111-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP);

18.5.4.3 ANSI T1.111A-1994 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Message Transfer Part (MTP) Supplement;

18.5.4.4 ANSI T1.112-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Signaling Connection Control Part (SCCP);

18.5.4.5 ANSI T1.113-1995 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Integrated Services Digital Network (ISDN) User Part;

18.5.4.6 ANSI T1.114-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Transaction Capabilities Application Part (TCAP);

18.5.4.7 ANSI T1.115-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Monitoring and Measurements for Networks;

18.5.4.8 ANSI T1.116-1990 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Operations, Maintenance and Administration Part (OMAP);

18.5.4.9 ANSI T1.118-1992 American National Standard for Telecommunications - Signaling System Number 7 (SS7) - Intermediate Signaling Network Identification (ISNI);

18.5.4.10 Bellcore GR-905-CORE, Common Channel Signaling Network Interface Specification (CCSNIS) Supporting Network Interconnection, Message Transfer Part (MTP), and Integrated Services Digital Network User Part (ISDNUP);

- 18.5.4.11 Bellcore GR-954-CORE, CCS Network Interface Specification (CCSNIS) Supporting Line Information Database (LIDB) Service;
- 18.5.4.12 Bellcore GR-1428-CORE, CCS Network Interface Specification ("CCSNIS") Supporting Toll Free Service;
- 18.5.4.13 Bellcore GR-1429-CORE, CCS Network Interface Specification (CCSNIS) Supporting Call Management Services; and
- 18.5.4.14 Bellcore GR-1432-CORE, CCS Network Interface Specification (CCSNIS) Supporting Signaling Connection Control Part (SCCP) and Transaction Capabilities Application Part (TCAP).

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INTERCONNECTION

1. Definitions

- 1.1 For purposes of this Attachment 4, "Interconnection" is the linking of the Qwest and CLEC networks for the mutual exchange of traffic. Interconnection does not include the transport and termination of traffic. Interconnection is provided by virtual or physical collocation, entrance facilities or meet point arrangements.

2. General Description

- 2.1 **Qwest will provide Interconnection at any technically feasible point, subject to negotiations between the Parties; such points may include, but not be limited to, a Meet Point, the line side distribution frame of the local switch, the trunk side distribution frame of the local switch, trunk interconnection points of the tandem switch, central office cross-connect points, and Signaling Transfer Points necessary to exchange traffic and access call related databases.¹**
- 2.2 **CLEC shall designate at least one POI in the LATA in which CLEC originates local traffic and interconnects with Qwest.²** CLEC will be responsible for engineering and maintaining its network on its side of the POI. If and when the Parties choose to interconnect at a mid-span meet, CLEC and Qwest will jointly provision the fiber optic facilities that connect the two (2) networks and shall share the financial and other responsibilities for that facility.
- 2.3 Within ten (10) Business Days of CLEC's request for any POI, Qwest shall provide any information in its possession or available to it regarding the environmental conditions of the interconnection route or location including, but not limited to, the existence and condition of asbestos, lead paint, hazardous substance contamination, or radon. Information is considered "available" under this Agreement if it is in Qwest's possession, or in the possession of a current or former agent, contractor, employee, lessor, or tenant of Qwest's.
- 2.4 Qwest shall allow CLEC to perform any environmental site investigations, including, but not limited to, asbestos surveys, CLEC deems to be necessary in support of its collocation needs. CLEC shall advise Qwest in writing of its intent to conduct any such investigations, and shall receive written approval from Qwest to proceed with the investigation, which approval shall not be unreasonably withheld. CLEC shall indemnify Qwest in accordance with the provisions of Section 18 of Part A of this Agreement for any loss or claim for damage suffered by Qwest as a result of CLEC's actions during any site inspection.

¹ MCIm Order, p. 6 at Issue 2 and AT&T Order at Issue 3(a).

² MCIm Order, p. 6 at Issue 2 and AT&T Order at Issue 3(a).

3. Location of Interconnection

- 3.1 CLEC will be responsible for implementing and maintaining its network on its side of the POI. Qwest will be responsible for implementing and maintaining its network on its side of the POI. If and when the Parties choose to interconnect at a Meet Point, CLEC and Qwest will jointly provision the fiber optic facilities that connect the two networks and shall proportionately share the financial and other responsibilities for that facility based on the reasonably negotiated Meet Point percentage.
- 3.2 If Interconnection is complicated by the presence of environmental contamination or hazardous materials, and an alternative route is available, Qwest shall make such alternative route available for CLEC's consideration.

4. Collocation

- 4.1 Interconnection may be accomplished through either virtual or physical Collocation. The terms and conditions under which Collocation will be available are described in Part A of this Agreement.

5. Entrance Facility

- 5.1 Interconnection may be accomplished using an entrance facility without the need for collocation. An entrance facility extends from the Point of Interface to a point within a Qwest central office.

6. Quality of Interconnection

- 6.1 Qwest will not, for the purpose of Interconnection, provide to CLEC less favorable terms and conditions than it provides itself or any other Person or in a manner less efficient than it would impose on itself or any other Person. The quality of Interconnection will be at least equal to that Qwest provides to itself or any other Person. To the extent that CLEC requests higher or lower quality Interconnection, CLEC agrees to use the Bona Fide Request process described in Part A of this Agreement.

7. Points of Interconnection

- 7.1 Upon a request for specific point to point routing, Qwest will make available to CLEC information indicating the location and technical characteristics of Qwest's network facilities. The following alternatives are negotiable and include, but are not limited to: (a) a DS-1 or DS-3 entrance facility, where facilities are available (where facilities are not available and Qwest is required to build special or additional facilities, special construction charges may apply); (b) virtual collocation; (c) physical collocation; and (d) negotiated Meet Point facilities. Each Party is responsible for providing its own facilities up to the Meet Point. The Parties will negotiate the facilities arrangement between their networks.

8. Trunking Requirements

- 8.1 Qwest agrees to provide designed interconnection facilities that meet the same industry standards for technical criteria and service standards, such as the probability of blocking in peak hours and transmission standards.
- 8.2 The Parties shall initially reciprocally terminate local exchange traffic and intraLATA/interLATA toll calls originating on each other's networks as follows:
- 8.2.1 There shall be no restrictions on traffic types carried. Until the access structure is revised, to accommodate non-segregated traffic, pursuant to rules promulgated by the FCC or the Commission, two-way trunk groups will be established wherever practical, based upon CLEC's request. **If Local Traffic and Toll Traffic are combined in one (1) trunk group, CLEC shall provide a measure of the amount of local and toll traffic relevant for billing purposes to Qwest. Qwest may audit the traffic reported to it by CLEC if it has reason to believe the reported measurement is not accurate. Such audit shall be conducted in accordance with the Audit Section set forth in this Agreement.**³ Exceptions to this provision will not be based on technical infeasibility, but will be based on billing, signaling, and network requirements. For example, exceptions include: (a) billing requirements - switched access vs. local traffic, (b) signaling requirements - MF vs. SS7, (c) network requirements - Directory Assistance traffic to TOPS tandems, and (d) one-way trunks for 911/E911. The following is the current list of traffic types that require separate trunk groups, unless otherwise specifically stated in this Agreement:
- (a) intraLATA toll and interLATA switched access trunks
 - (b) EAS/local trunks
 - (c) Directory Assistance trunks
 - (d) 911/E911 trunks
 - (e) Operator Services trunks
 - (f) Non-Qwest toll (transit toll to other providers)
 - (g) Non-Qwest local (transit local to other providers)
 - (h) Commercial Mobile Radio Service/Wireless traffic
- 8.3 Separate trunk groups will be established connecting CLEC's switch or CLEC's Operator Service center to Qwest's Operator Service center for operator-assisted busy line interrupt/verify. For traffic from the Qwest network to CLEC for Operator Services, Qwest will provide one (1) trunk group per LATA served by the local Qwest switch.

³ AT&T Order, p. 37.

8.4 Trunk Servicing

- 8.4.1 Orders between the Parties to establish, add, change or disconnect trunks shall be processed by use of an Access Service Request ("ASR") or another industry standard for local service ordering.
- 8.4.2 As further described in this Agreement, both Parties will jointly manage the capacity of Local Interconnection trunk groups. Qwest's trunk servicing group will send a Trunk Group Service Request ("TGSR"), or another industry standard eventually adopted to replace the TGSR, to CLEC to trigger changes Qwest desires to the Local Interconnection trunk groups based on Qwest's capacity assessment. CLEC will issue an ASR or other industry ordering standard to Qwest:
- (a) within ten (10) Business Days after receipt of the TGSR, upon review of and in response to Qwest's TGSR, or
 - (b) at any time, as a result of CLEC's own capacity management assessment, to begin the provisioning process. The interval used for the provisioning of Local Interconnection trunk groups shall be no longer than the standard interval for the provisioning of Qwest's Switched Access service and shall be consistent with Qwest's actual provisioning intervals for its own Switched Access customers.
- 8.4.3 Qwest will attempt to meet CLEC's requested due date for the provision of Local Interconnection trunk groups. Where the installation of Local Interconnection trunk groups is required within a time that is shorter than the standard interval, the Parties will make all reasonable efforts and cooperate in good faith to ensure that the mutually agreed upon due date is met.
- 8.4.4 Orders that comprise a major project may be submitted at the same time, in which case their implementation shall be jointly planned and coordinated. Major projects are those that require the coordination and execution of multiple orders or related activities between and among Qwest and CLEC work groups, including, but not limited to, the initial establishment of Local Interconnection or Meet Point trunk groups and service in an area, NXX code moves, re-homes, facility grooming, or network rearrangements.

8.5 Trunking Requirements

- 8.5.1 Trunk group connections will be made at a DS-1 or multiple DS-1 level for exchange of EAS/local, intraLATA toll, wireless/Commercial Mobile Radio Service, and Switched Access Traffic. Ancillary Service trunk groups will be made below a DS-1 level, as agreed to by the Parties.
- 8.5.2 Where CCS is not available, in-band multi-frequency (MF) wink start signaling will be provided. This MF arrangement will require a separate local trunk circuit between CLEC's switch and Qwest's tandems. Reference Technical Pub. TR-314 and TR394.

9. Service Interruptions

- 9.1 Standards and procedures for notification of trunk disconnects will be jointly developed by the Parties within ninety (90) days of the Effective Date of this Agreement. Neither Party shall be expected to maintain active status for a trunk disconnected by the other Party for an extended or indefinite period of time.
- 9.2 The characteristics and methods of operation of any circuits, facilities or equipment of either Party connected with the services, facilities or equipment of the other Party pursuant to this Agreement shall not: (a) interfere with or impair service over any facilities of the other Party; its Affiliates, or its connecting and concurring carriers involved in its services; (b) cause damage to their plant; (c) violate any applicable law or regulation regarding the invasion of privacy of any communications carried over the Party's facilities; or (d) create hazards to the employees of either Party or to the public.
- 9.3 Each Party shall be solely responsible, and bear the expense, for the overall design of its services. Each Party shall also be responsible for any redesign or rearrangement of its services that may be required because of changes in facilities, operations or procedures, minimum network protection criteria, and operating or maintenance characteristics of the facilities. If one Party creates a circumstance causing additional costs to the other Party, the other Party may collect construction charges from the first Party.
- 9.4 To facilitate trouble reporting and to coordinate the repair of the service provided by each Party to the other under this Agreement, each Party shall designate and define a Trouble Reporting Control Office ("TRCO") for such service. Each Party shall furnish a trouble reporting telephone number for the designated TRCO. This number shall have access to the location where facility records are normally located and where current status reports on any trouble reports are readily available. Current and historical trouble reports will be made available, if necessary. Alternative out-of-hours procedures shall be established to ensure access to a location that is staffed and has the authority to initiate corrective action.
- 9.5 Where new facilities, services and arrangements are installed to rectify the service interruption, the TRCO shall ensure that continuity exists and take appropriate transmission measurements before advising the other Party that the new circuit is ready for service.
- 9.6 The Parties shall cooperate in isolating trouble conditions. Before either Party reports a trouble condition, it shall use reasonable efforts to isolate the trouble.
- 9.7 In cases where a trouble condition affects a significant portion of the other Party's service, the Parties shall assign the same priority provided to other interconnecting carriers.

10. Forecasting

- 10.1 The Parties agree that during the first year of Interconnection, joint forecasting and planning meetings will take place no less frequently than once per quarter.

- 10.2 The Parties shall establish joint forecasting responsibilities for traffic utilization over trunk groups. Intercompany forecast information must be provided by the Parties to each other four (4) times a year. The quarterly forecasts shall include forecasted requirements for each trunk group identified in Paragraph 8.2.1 of this Attachment. In addition, for tandem-switched traffic, the forecast shall include the quantity of tandem-switched traffic forecasted for each subtending end office. The Parties recognize that, to the extent historical traffic data can be shared between the Parties, the accuracy of the forecasts will improve. Forecasts shall be for a minimum of three (3) (current and plus-1 and plus-2) years and shall include:
 - 10.2.1 the use of Common Language Location Identifier (CLLI-MSG), which is described in Bellcore documents BR 795-100-100 and BR 795-400-100; and
 - 10.2.2 a description of major network projects anticipated for the following six (6) months that could affect the other Party. Major network projects include trunking or network rearrangements, shifts in anticipated traffic patterns, or other activities that are reflected by a significant increase or decrease in trunking demand for the following forecasting period. This planning will include the issues of network capacity, forecasting and compensation calculation, where appropriate.
 - 10.2.3 If forecasts vary significantly, the Parties shall meet to review and reconcile such forecasts.
 - 10.2.3.1 If the Parties are unable to reach such a reconciliation, the Local Interconnection trunk groups shall be provisioned to the higher forecast. At the end of three (3) months, the utilization of the Local Interconnection trunk groups will be reviewed and if the average CCS utilization for the third month is under seventy five percent (75%) of capacity, either Party may issue an order to resize the trunk group, which shall be left with not less than twenty five percent (25%) excess capacity.
 - 10.2.3.2 If the Parties agree on the original forecast and then it is determined that a trunk group is under seventy five percent (75%) of CCS capacity on a monthly-average basis for each month of any three-month period, either Party may issue an order to resize the trunk group, which shall be left with not less than twenty five percent (25%) excess capacity. In all cases, grade of service objectives identified in this Agreement shall be maintained.
- 10.3 Each Party shall provide a specified point of contact for planning, forecasting and trunk serving purposes.
- 10.4 Trunking can be established to tandems or end offices or a combination of both via either one-way or two-way trunks. Trunking will be at the DS-0 level, DS-1 level, DS-3 level, or any other technically feasible level, subject to network disclosure requirements of the FCC. Initial trunking will be established between CLEC's switching centers and Qwest's access tandem(s). The Parties will utilize direct end office trunking under the following conditions:

- 10.4.1 Tandem exhaust - If a tandem through which the Parties are interconnected is unable to, or is forecasted to be unable to, support additional traffic loads for any period of time, the Parties will mutually agree on an end office trunking plan that will alleviate the tandem capacity shortage and ensure completion of traffic between CLEC and Qwest subscribers.
- 10.4.2 Traffic volume - The Parties shall install and retain direct end office trunking sufficient to handle actual or reasonably forecasted traffic volumes, whichever is greater, between a CLEC switching center and a Qwest end office where the local traffic exceeds or is forecasted to exceed 512 CCS at the busy hour.
- 10.4.3 Mutual agreement - The Parties may install direct end office trunking upon mutual agreement in the absence of conditions (1) or (2) above, which agreement shall not unreasonably be withheld.

10.5 Grade of Service:

A blocking standard of one percent (1%) during the average busy day-busy hour, as defined by each Party's standards, for final trunk groups between a CLEC end office and a Qwest access tandem carrying Meet Point traffic shall be maintained. All other final trunk groups are to be engineered with a blocking standard of one percent (1%). Direct end office trunk groups are to be engineered with a blocking standard of one percent (1%).

11. Signaling

- 11.1 Signaling protocol. The Parties will interconnect their networks using SS7 signaling as defined in GR-317 and GR-394, including ISDN User Part ("ISUP") for trunk signaling and Transaction Capabilities Application Part ("TCAP") for CCS-based features in the interconnection of their networks. All appropriate industry standards for signaling interoperability will be followed.
- 11.2 The Parties will provide CCS to each other in conjunction with all trunk groups supporting Local, Transit, and Toll Traffic. The Parties will cooperate on the exchange of TCAP messages to facilitate full interoperability of CCS-based features between their respective networks, including all CLASS features and functions. All CCS signaling parameters will be provided, including automatic number identification (ANI), originating line information (OLI), calling party category, charge number, etc. For terminating Feature Group D, the Parties will pass CPN if it receives CPN from Feature Group D carriers. All privacy indicators will be honored. Where available, network signaling information such as Transit Network Selection ("TNS") parameter (CCS platform) and CIC/OZZ information (non-CCS environment) will be provided by the Parties wherever such information is needed for call routing or billing. The Parties will follow all appropriate industry standards pertaining to TNS and CIC/OZZ codes.
- 11.3 Standard Interconnection facilities shall be Extended Superframe (ESF) with B8ZS line code. Where ESF/B8ZS is not available, CLEC will agree to using other Interconnection protocols on an interim basis until the standard ESF/B8ZS is available. Qwest will provide anticipated dates of availability for those areas not currently ESF/B8ZS compatible.

- 11.4 Where CLEC is unwilling to utilize an alternate Interconnection protocol, CLEC will provide Qwest an initial forecast of 64 Kbps clear channel capability ("64K CCC") trunk quantities within thirty (30) days of the Effective Date of this Agreement consistent with the forecasting agreements between the Parties. Upon receipt of this forecast, the Parties will begin joint planning for the engineering, procurement, and installation of the designated 64K CCC Local Interconnection trunk groups and the associated B8ZS Extended Super Frame facilities, for the purpose of transmitting 64K CCC data calls between CLEC and Qwest. Where additional equipment is required, such equipment will be obtained, engineered, and installed on the same basis and with the same intervals as any similar growth job for an IXC, CLEC or Qwest internal customer demand for 64K CCC trunks. Where technically feasible, these trunks will be established as two-way.

12.⁴ Ordering

- 12.1 CLEC may order Interconnection points beyond those listed in the FCC rules using the ASR process or other industry standard for local service ordering.
- 12.2 Qwest must provide installation to CLEC in the shorter of the time it provides installation to itself or any other Person. Qwest must provide installation to CLEC within ten (10) Business Days if it does not provide the same installation to itself or any other Person.
- 12.3 If CLEC requests a shorter installation time than required by the provisions of this Attachment, Qwest may charge CLEC for any increased expense incurred for such installation.
- 12.4 CLEC shall, on each order for Local Interconnection trunks, specify the CLEC NXXs that are assigned to the trunks.

13. Network Management

13.1 Protective Protocols

Either Party may use protective network traffic management controls such as 7-digit and 10-digit code gaps on traffic toward each others network when required to protect the public switched network from congestion due to facility failures, switch congestion or failure or focused overload.

⁴ MCI Order, p. 5 at Issue 1.

13.2 Rerouting Protocols

Where the capability exists, originating or terminating traffic reroutes may be implemented by either Party to temporarily relieve network congestion due to facility failures or abnormal calling patterns. Reroutes will not be used to circumvent normal trunk servicing. Rerouting controls will only be used when mutually agreed to by the Parties.

13.3 Mass Calling

CLEC and Qwest shall cooperate and share pre-planning information, where available and in compliance with federal and state regulations, regarding cross-network call-ins expected to generate large or focused temporary increases in call volumes, to prevent or mitigate the impact of these events on the public switched network. Furthermore, INP numbers may only be used consistent with network efficiency and integrity, i.e., inhibitions on mass calling events.

14. Usage Measurement**14.1 When applicable, each Party shall provide to the other:**

14.1.1 Bellcore AMA formatted records to generate bills to the other Party;

14.1.2 measurement of minutes of use over Local Interconnection trunk groups in actual conversation seconds. The total conversation seconds over each individual Local Interconnection trunk group will be totaled for the entire monthly bill-round and then rounded to the next whole minute; and

14.1.3 within twenty (20) calendar days after the end of each quarter (commencing with the first full quarter after the Effective Date of this Agreement), a usage report with the total traffic volume described in terms of minutes and messages and by call type (i.e., local, toll, and other) terminated to each other over SS7 local interconnection trunk groups.

15. Audiotext and Mass Announcement Services

The Parties agree that access to the audiotext, mass announcement and information services of one Party may be made available to the other Party upon execution of a separate agreement or an amendment to this Agreement.

16. Interconnection to Network Elements**16.1 Technical Requirements**

16.1.1 When requested by CLEC, Qwest shall provide Interconnection between Qwest Network Elements provided to CLEC and CLEC's network at transmission rates designated by CLEC. If additional equipment beyond that which Qwest currently has in place is planning to put in place or is otherwise required to have in place is

required to meet such transmission rates, the installation and/or acquisition of such equipment shall be accomplished pursuant to the ordering process set forth in this Agreement.

16.1.2 Traffic shall be combined and routed as follows:

- 16.1.2.1 At CLEC's request, Qwest shall receive CLEC traffic destined to the Qwest Operator Systems Network Element, on trunks from a CLEC end-office or a CLEC tandem.
 - 16.1.2.2) At CLEC's request, Qwest shall receive CLEC CAMA-ANI (Centralized Automatic Message Accounting - Automatic Number identification) traffic destined to the Qwest 911 PSAPs, or E911 tandems, on trunks from a CLEC end-office.
 - 16.1.2.3 At CLEC's request, Qwest shall receive CLEC SS7 traffic destined to any Qwest E911 tandem on trunks from a CLEC end-office, when SS7 E911 signaling is available in Qwest's network.
- 16.1.3 When requested by CLEC and a third party carrier, Qwest shall provide interconnections between CLEC's network, and the other carrier's network through the Qwest network at transmission rates designated by CLEC, including, but not limited to, DS-1, DS-3, and STS-1, where available. Qwest shall combine and route traffic to and from other local carriers and interLATA carriers through the Qwest network, and, at CLEC's request, Qwest shall record and keep records of such traffic for CLEC billing purposes to the extent possible.
- 16.1.4 Qwest shall provide two-way trunk groups for Interconnections. At CLEC's request, and consistent with an efficient network architecture, Qwest shall provide unidirectional traffic on such trunks, in either direction, effectively operating them as if they were one-way trunk groups.
- 16.1.5 All trunking provided by Qwest shall adhere to the applicable performance requirements set forth in the "General Performance Requirements" section of this Agreement, pursuant to Sections 1.3.1 and 1.3.2 of Part A of this Agreement.
- 16.1.6 At CLEC's request, Qwest shall work cooperatively with CLEC to provide for overflow routing from a given trunk group or groups onto another trunk group or groups as CLEC designates.
- 16.1.7 Qwest and CLEC shall agree on the establishment of two-way trunk groups for the exchange of traffic for other IXC's. These trunk groups can be provided in a meet point arrangement.
- 16.1.8 Interconnection shall be made available upon CLEC's request at any technically feasible Point of Interface. All trunk interconnections shall be provided, including SS7, MF, DTMF, DialPulse, PRI-ISDN (where available), DID (Direct Inward Dialing), CAMA-ANI, and trunking necessary so that INP can be provided.

16.2 Trunk Interface Requirements

16.2.1 E911 Trunks

16.2.1.1 Qwest shall allow CLEC to provide direct trunking to each Qwest E911 end office or tandem, as is appropriate for the applicable serving area. These trunks are to be provided as one-way trunks from a given CLEC end office to the Qwest E911 end office or tandem.

16.2.1.2) Qwest shall provide for overflow E911 traffic in the same manner that Qwest provides E911 overflow for itself.

16.2.2 S911 Trunks

If and when S911 tandems become available in the Qwest network, Qwest shall allow CLEC to provide direct trunking to each Qwest S911 tandem. Such SS7 trunks are to be provided as one-way trunks from a given CLEC end-office to the Qwest S911 tandem.

16.2.3 Local Switch and Access Tandem Trunks

16.2.3.1 Qwest shall provide trunks groups provisioned exclusively to carry intraLATA Toll Traffic, as designated by CLEC.

16.2.3.2 Qwest shall provide trunk groups provisioned exclusively to carry interLATA traffic, as designated by CLEC.

16.2.3.3 Qwest shall provide SS7 trunks which provide SS7 Interconnection. At CLEC's request, MF trunks may be substituted for SS7 trunks where applicable.

16.2.3.4 Qwest shall simultaneously route calls based on dialed digits (in accordance with the standard GR-317-CORE), and Carrier Identification Code (in accordance with the standard GR-394-CORE) over a single SS7 trunk group.

16.2.4 Qwest Operator Services Trunk

Qwest shall provide Operator Services trunks as one-way trunks from the Qwest network to the CLEC network.

16.3 Network Interconnection between Qwest and CLEC shall meet or exceed all of the requirements for network Interconnection set forth in the following technical references:

16.3.1 GR-317-CORE, Switching System Generic Requirements for Call Control Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February 1994;

- 16.3.2 GR-394-CORE, Switching System Generic Requirements for Interexchange Carrier Interconnection Using the Integrated Services Digital Network User Part (ISDNUP), Bellcore, February 1994;
- 16.3.3 FR-NWT-000271, OSSGR Operator Services Systems Generic Requirements, Bellcore, 1994 Edition; and
- 16.3.4 FR-NWT-000064, LATA Switching Systems Generic Requirements (LSSGR), Bellcore, 1994 Edition.

17. Reciprocal Traffic Exchange

17.1 Scope

Reciprocal traffic exchange addresses the exchange of traffic between CLEC end users and Qwest end users. If such traffic is local, the provisions of this Agreement shall apply. Where either Party acts as an intraLATA toll provider or interLATA IXC or where either Party interconnects and delivers traffic to the other from third parties, each Party shall bill such third parties the appropriate charges pursuant to its respective tariffs or contractual offerings for such third party terminations. Absent a separately negotiated agreement to the contrary, compensation for reciprocal traffic exchange applies solely to traffic exchanged directly between the Parties without the use of third party transit providers.

17.2 Responsibilities of the Parties

- 17.2.1 Qwest and CLEC agree to treat each other fairly, nondiscriminatorily, and equally for all items included in this Agreement, or related to the support of items included in this Agreement.
- 17.2.2 CLEC and Qwest agree to exchange such reports and/or data as provided in this Agreement to facilitate the proper billing of traffic.
- 17.2.3 [Intentionally left blank for numbering consistency]
- 17.2.4 CLEC and Qwest shall share responsibility for all Control Office functions for Local Interconnection trunks and trunk groups, and both Parties shall share the overall coordination, installation, and maintenance responsibilities for these trunks and trunk groups.
- 17.2.5 The Party that performs the End Office function is responsible for all Control Office functions for the meet point trunking arrangement trunks and trunk groups, and shall be responsible for the overall coordination, installation, and maintenance responsibilities for these trunks and trunk groups.

17.2.6 CLEC and Qwest shall:

- 17.2.6.1 Provide trained personnel with adequate and compatible test equipment to work with each other's technicians.
- 17.2.6.2 Notify each other when there is any change affecting the service requested, including the due date.
- 17.2.6.3 Coordinate and schedule testing activities of their own personnel, and others as applicable, to ensure its Interconnection trunks/trunk groups are installed per the Interconnection order, meet agreed-upon acceptance test requirements, and are placed in service by the due date.
- 17.2.6.4 Perform sectionalization to determine if a trouble is located in its facility or its portion of the Interconnection trunks prior to referring the trouble to each other.
- 17.2.6.5 Advise each other's Control Office if there is an equipment failure which may affect the Interconnection trunks.
- 17.2.6.6 Provide each other with a trouble reporting/repair contact number that is readily accessible and available twenty-four (24) hours per day, seven (7) days per week. Any changes to this contact arrangement must be immediately provided to the other Party.
- 17.2.6.7 Provide to each other test-line numbers and access to test lines.
- 17.2.6.8 Cooperatively plan and implement coordinated repair procedures for the meet point and Local Interconnection trunks and facilities to ensure trouble reports are resolved in a timely and appropriate manner.

17.3 Types of Traffic

- 17.3.1 The types of traffic to be exchanged or provided under this Agreement include, but are not limited to, the following:
 - 17.3.1.1 EAS/Local Traffic,
 - 17.3.1.2 Transit Traffic,
 - 17.3.1.3 Switched Access Traffic,
 - 17.3.1.4 Ancillary traffic includes all traffic destined for Ancillary Services, or that may have special billing requirements, including, but not limited to, the following:
 - (a) Directory Assistance

- (b) 911/E911
- (c) Operator call termination (busy line interrupt and verify)
- (d) 800/888 database dip
- (e) LIDB
- (f) Information services requiring special billing.

17.3.1.5 Unless otherwise stated in this Agreement, ancillary traffic will be exchanged in accordance with whether the traffic is Local/EAS, intraLATA toll, or Switched Access.

17.4 Transport and Termination of Exchange Traffic

17.4.1 Termination of Local Traffic

Local Traffic will be terminated pursuant to the Reciprocal Compensation described in Attachment 1.

17.4.2 EAS/Local Traffic

As negotiated between the Parties, the exchange of local traffic between the Parties may occur in several ways.

(a) While the Parties anticipate the use of two-way trunks for the delivery of Local Traffic, either Party may elect to provision its own one-way trunks for delivery of Local Traffic to be terminated on the other Party's network at the "initial" point of Interconnection;

(b) The Parties may elect to purchase transport services from each other or from a third party. Such transport delivers the originating Party's Local Traffic to the terminating Party's end office or tandem for call termination. Transport may be purchased as either tandem switched transport (which is included in the tandem call termination rate) or direct trunk transport;

(c) To the extent that CLEC has established a Collocation arrangement at a Qwest end office location, and has available capacity, the Parties agree that CLEC shall provide two-way direct trunk facilities, when required, from that end office to the CLEC switch. In all other cases, the direct facility may be provisioned by Qwest or CLEC or a third party. If both CLEC and Qwest desire to provision the facility and cannot otherwise agree, the Parties may agree to resolve the dispute through the submission of competitive bids.

17.4.3 Transit Traffic

17.4.3.1 Qwest will accept traffic originated by CLEC and will terminate it at a point of interconnection with another CLEC, Exchange Carrier, IXC or Wireless Carrier. Qwest will provide this transit service through Tandem Office Switches. CLEC may also provide Qwest with transit service.

17.4.3.2 The Parties expect that all networks involved in transporting Transit Traffic will deliver calls to each involved network with CCS/SS7 protocol and the appropriate ISUP/TCAP message to facilitate full interoperability and billing functions. In all cases, the originating company is responsible to follow the EMR standard and to exchange records with both the transiting company and the terminating company, to facilitate the billing process to the originating network.

17.4.3.3 The Parties will use industry standards developed to handle the provision and billing of Switched Access by multiple providers (MECAB, MECOD and the Parties' FCC tariffs).

17.4.4 Toll Traffic

Toll Traffic routed to an access tandem, or directly routed to an end office, will be terminated as Switched Access Service.

17.5 Interface Code Availability And Optional Features

17.5.1 Interface Code Availability

Supervisory Signaling specifications, and the applicable network channel interface codes for Local Interconnection trunks, are the same as those used for Feature Group D Switched Access Service, as described in the Parties' applicable Switched Access tariffs.

17.5.2 Optional Features

17.5.2.1 Inband MF or SS7 Out of Band Signaling

Inband MF signaling and SS7 out of band signaling are available for local trunks. MF signaling or SS7 out-of-band signaling must be requested on the order for the new local trunks. Provisioning of the local trunks equipped with MF signaling or SS7 out of band signaling is the same as that used for Feature Group D Switched Access. Common Channel Signaling Service, as described in this Agreement, must be ordered by CLEC when SS7 out-of-band signaling is requested on local trunks.

17.5.2.2 Clear Channel Capability

Clear channel capability permits 24 DS-0-64 kbit/s services or 1.536 Mbit/s of information on the 1.544 Mbit/s line rate. Clear channel capability is available for local trunks equipped with SS7 out-of-band signaling. Clear channel capability is only available on trunks to Qwest's access tandem switch or Qwest's end office switches (where available). Clear channel capability must be requested on the order for the new local trunks. The provisioning of the local trunks equipped with clear channel capability is the same as that used for Feature Group D Switched Access Service. Qwest will provide CLEC with a listing of Qwest end offices, local tandems and access tandems equipped with clear channel capability. (Clear channel capability is not available on trunks to Qwest's local tandem switches or end offices)

where it is currently not deployed. CLEC agrees to use the Bona Fide Request process to request clear channel capability for such additional switches. Prices for such additional clear channel capability, if any, will be established through the BFR process).

17.6 Measuring Local Interconnection Minutes

17.6.1 Measurement of terminating Local Interconnection minutes, as calculated per Attachment 5, begins when the terminating local entry switch receives answer supervision from the called end user's end office indicating the called end user has answered. The measurement of terminating call usage over local trunks ends when the terminating local entry switch receives disconnect supervision from either the called end user's end office, indicating the called end user has disconnected, or CLEC's Point of Interconnection, whichever is recognized first by the entry switch.

17.6.2 Qwest and CLEC are required to provide each other the proper call information (e.g., originated call party number and destination call party number, etc.) to enable each Party to issue bills in a complete and timely fashion.

17.7 Testing

17.7.1 Acceptance Testing

At the time of installation of a local trunk group, and at no additional charge, the Parties will cooperatively test the same parameters tested for terminating Feature Group D Switched Access Service.

17.7.2 Testing Capabilities

17.7.2.1 Terminating Local Interconnection trunk testing is provided where equipment is available, with the following test lines: seven-digit access to balance (100 type), milliwatt (102 type), nonsynchronous or synchronous, automatic transmission measuring (105 type), data transmission (107 type), loop-around, short circuit, open circuit, and non-inverting digital loopback (108 type).

17.7.2.2 In addition to Local Interconnection trunk acceptance testing, other tests are available (e.g., additional cooperative acceptance testing, automatic scheduled testing, cooperative scheduled testing, manual scheduled testing, and non-scheduled testing) at the applicable tariff rates.

17.10. Mileage Measurement

Where required, the mileage measurement for Local Interconnection facilities and trunks is determined in the same manner as the mileage measurement for Feature Group D Switched Access Service.

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1. General Business Requirements

1.1 Procedures

1.1.1 Qwest Contact with Subscribers

1.1.1.1 CLEC at all times shall be the primary contact and account control for all interactions with its subscribers, except as specified by CLEC. CLEC subscribers include active Customers as well as those for whom service orders are pending.

1.1.1.2 Qwest shall ensure that any Qwest personnel who may receive customer inquiries, or otherwise have opportunity for subscriber contact: (a) provide appropriate referrals and telephone numbers to subscribers who inquire about CLEC services or products; (b) do not in any way disparage CLEC or its products or services during such inquiry or subscriber contact; and (c) do not provide information about Qwest products or services during that same inquiry or subscriber contact.

1.1.1.3 CLEC shall ensure that any CLEC personnel who may receive customer inquiries, or otherwise have opportunity for subscriber contact: (a) provide appropriate referrals and telephone numbers to subscribers who inquire about Qwest services or products; (b) do not in any way disparage Qwest or its products or services during such inquiry or subscriber contact; and (c) do not provide information about CLEC products or services during that same inquiry or subscriber contact.

1.1.1.4 Qwest shall not use CLEC's request for subscriber information, order submission or any other aspect of CLEC's processes or services to aid Qwest's marketing or sales efforts.

1.1.2 Expedite, Escalation and Disaster Procedures

1.1.2.1 No later than sixty (60) days after the Effective Date of this Agreement, Qwest and CLEC shall develop mutually acceptable escalation and expedite procedures which may be invoked at any point in the Service Ordering, Provisioning, Maintenance and Subscriber Usage Data transfer processes to facilitate rapid and timely resolution of disputes. Within the said sixty (60) day period, Qwest and CLEC will establish intercompany contact lists for purposes of handling subscriber and other matters which require attention/resolution outside of normal business procedures. To the extent possible, Qwest shall notify CLEC of any changes to its escalation contact list at least one (1) week before such changes are effective.

1.1.2.2 No later than sixty (60) days after the Effective Date of this Agreement, Qwest and CLEC shall jointly establish contingency and disaster recovery plans for those cases in which normal service ordering, provisioning, maintenance, billing and other procedures for Qwest's unbundled Network Elements, features, functions and Resale Services are inoperable.

1.1.3 Operational and Technological Changes

1.1.3.1 Qwest shall notify CLEC of any material operational or technological (e.g., network, systems interfaces) changes related to any services, Interconnection methods, or Network Elements purchased by CLEC. At the time Qwest decides to make such a change, Qwest will notify CLEC in sufficient time to allow CLEC to make necessary adjustments to accommodate the change, but in no case with less than thirty (30) days' notice, unless otherwise agreed to by the Parties. Objections to the proposed change must be given in writing to Qwest in a reasonable time. For the purposes of this Section, material changes shall be defined as those changes which will likely impact current interactions between CLEC (or its customers) and Qwest.

1.1.3.2 Qwest agrees to notify CLEC whenever a CLEC subscriber who is provided local service through Services for Resale, INP/NP, or unbundled Network Elements changes CLEC PIC status.

1.1.4 Customer of Record

1.1.4.1 Providing CLEC has obtained proper customer authorization, Qwest shall recognize CLEC as the Customer of Record for all Network Elements or Services for Resale ordered by CLEC and shall send all notices, invoices, and information which pertain to such ordered services directly to CLEC. CLEC will provide Qwest with addresses to which Qwest shall send all such notices, invoices, and information.

1.1.5 Work Center Interface Procedures

1.1.5.1 Qwest and CLEC shall, within ninety (90) days of the Effective Date of this Agreement, develop and implement work center interface procedures for each function/ business process necessary for fulfilling the terms of this Agreement.

1.2 Service Offerings

1.2.1 Changes in Retail Service Offerings

1.2.1.1 Pursuant to Section 23.2 of Part A of this Agreement, Qwest shall provide summaries to CLEC describing the proposed change(s) of services which are available for resale pursuant to this Agreement.

1.2.1.2 [Intentionally left blank for numbering consistency]

1.2.1.3 Qwest shall provide CLEC with access to new services, features, and functions concurrent with Qwest's notice to CLEC of such changes, so that CLEC may evaluate these services.

1.2.2 Essential Services

1.2.2.1 Qwest shall designate trunks or lines as an Essential Service Line (ESL) or Telecommunications Service Priority (TSP), whichever is applicable, upon CLEC's request, based on industry standards.

1.2.3 Blocking Services

1.2.3.1 Upon request from CLEC, Qwest shall provide blocking in accordance with Qwest standard intervals for 700, 900, and 976 services, or other services of similar type as may now exist or may be developed in the future according to industry standards, and shall provide Billed Number Screening ("BNS"), including required LIDB updates, or equivalent service for blocking completion of bill-to-third party and collect calls, on a line, trunk, or individual service basis.

1.2.4 Training Support

1.2.4.1 Qwest will train its employees who may communicate with CLEC subscribers to treat CLEC in a nondiscriminatory manner. Qwest will solicit and may take into account input from CLEC in the development of such training and will permit CLEC to review, but not approve, such training. Such training will comply with the branding requirements of this Agreement.

1.2.4.2 Qwest or its agent shall train CLEC employees on Qwest's systems and processes necessary to assure the accuracy of required information exchange between CLEC. Information/materials provided to CLEC should include, at a minimum, operational and procedural information, and Qwest-specific system access/interface instruction for performing similar functions.

1.2.5 Carrier Identification Codes

Qwest shall provide to CLEC the active Carrier Identification Codes (CIC) for both Dial 1 and toll free (e.g., 800, 888) services for each of its access tandems pursuant to industry guidelines.

2. Pre-Ordering

2.1 General Business Requirements

2.1.1 Street Address Guide (SAG)

Within sixty (60) days after the Effective Date of this Agreement, Qwest shall provide to CLEC the SAG data, in an electronic format, when available, or otherwise as mutually agreed. All changes to the SAG shall be provided to CLEC on a weekly basis.

2.1.2 CLASS and Custom Features

2.1.2.1 CLEC may order the entire set of CLASS and Custom features and functions, or a subset of any one or any combination of such features. In addition, Qwest

shall provide CLEC with a list of features and functions available on an end office by end office basis.

2.1.3 Customer Payment History

2.1.3.1 CLEC and Qwest agree to make available to a mutually agreed upon third-party credit reporting agency, on a timely basis, such of the following Customer payment history information available for each person or entity that applies for local service or intraLATA toll Telecommunications Service(s) from either Party.

- 2.1.3.1.1 Applicant's name;
- 2.1.3.1.2 Applicant's address;
- 2.1.3.1.3 Applicant's previous phone number, if any;
- 2.1.3.1.4 Amount, if any, of unpaid balance in applicant's name;
- 2.1.3.1.5 Whether applicant is delinquent on payments;
- 2.1.3.1.6 Length of service with prior local or intraLATA toll provider;
- 2.1.3.1.7 Whether applicant had local or intraLATA toll service terminated or suspended within the last six (6) months with an explanation of the reason therefor; and,
- 2.1.3.1.8 Whether applicant was required by prior local or intraLATA toll provider to pay a deposit or provide another form of security, including the amount of each.

2.1.3.2 Such information shall be provided on the condition that the credit reporting agency only make such information available to the carrier to which the person or entity in question has applied for Telecommunication Service(s).

2.1.4 Number Administration/Number Reservations

2.1.4.1 Until Number Administration functions are assumed by a neutral third party in accordance with FCC rules and regulations, Qwest shall assign NXXs to CLEC on a non-discriminatory and equivalent basis following NANP guidelines. In addition, Qwest shall provide testing and loading of CLEC's NXX on the same basis as Qwest provides itself or its Affiliates. Further, in Qwest's role as number administrator, it shall provide CLEC with access to abbreviated dialing codes, access arrangements for 555 line numbers, and the ability to obtain telephone numbers, including vanity numbers, while a customer is on the phone with CLEC. Qwest shall provide the same range of number choices to CLEC, including choice of exchange number, as Qwest provides its own customers. Reservation and aging of numbers shall remain Qwest's responsibility.

2.1.4.2 CLEC may reserve blocks of Qwest telephone numbers in accordance with Qwest's tariffs, or in the same manner Qwest reserves telephone numbers for its own use.

2.1.4.3 Where CLEC has obtained its own NXX, but has purchased Qwest Services for Resale or Network Elements, Qwest agrees to recognize the CLEC NXX in Qwest's switch according to the local calling area defined by CLEC and approved by the Commission.

2.1.4.4 For resale and the unbundled switching element, Qwest shall accept CLEC orders for vanity numbers and blocks of numbers for use with complex services including, but not limited to, DID, CENTREX, and hunting arrangements, as requested by CLEC on a non-discriminatory, equivalent basis following NANP guidelines.

2.1.4.5 For simple services, Qwest shall provide real-time electronic interfaces to CLEC to obtain telephone number confirmation while the customer is on the line. When real time electronic interfaces are not available for simple services number reservations, Qwest shall provide alternative means for confirmation of the number reservation while the customer is on the line. For number reservations associated with complex services, Qwest shall provide confirmation of the number reservation within forty-eight (48) hours of CLEC's request or within such time as Qwest may provide to itself or Affiliates, whichever is less.

2.1.4.6 Number Resources Arrangements

2.1.4.6.1 Nothing in this Agreement shall be construed in any manner to limit or otherwise adversely impact either Party's right to the request and assignment of any NANP number resources including, but not limited to, central office (NXX) codes pursuant to the Central Office Code Assignment Guidelines (last published by the Industry Numbering Committee ("INC") as INC 95-0407-008, Revision 4/19/96, formerly ICCF 93-0729-010).

2.1.4.6.2 To the extent Qwest serves as Central Office Code Administrator for a given region, Qwest will support all CLEC requests related to central office code (NXX) administration and assignments in the manner required and consistent with the Central Office Code Assignment Guidelines.

2.1.4.6.3 [Intentionally left blank for numbering consistency]

2.1.4.6.4 The Parties will comply with (NXX) administration requirements as prescribed by the FCC, the Commission, and accepted industry guidelines.

2.1.4.6.5 It shall be the responsibility of each Party to program and update its own switches and network systems pursuant to the Local Exchange Routing Guide ("LERG") guidelines to recognize and route traffic to the other Party's assigned NXX codes at all times. Neither Party shall impose any fees or charges whatsoever on the other Party for such activities. The Parties will cooperate to establish procedures to ensure the timely activation of NXX assignments in their respective networks.

2.1.4.6.6 Each Party shall be responsible for notifying its customers of any changes in numbering or dialing arrangements to include changes such as the introduction of new NPAs or new NXX codes.

2.1.4.6.7 Until an impartial entity is appointed to administer telecommunications numbering, Qwest will assign NXX codes to CLEC in accordance with national guidelines at no charge and on a nondiscriminatory basis.

2.1.4.6.8 Each Party is responsible for administering NXX codes assigned to it. Each Party is responsible for obtaining LERG listings of CLLI codes assigned to its switches. Each Party shall use the LERG published by Bellcore or its successor for obtaining routing information and shall provide all required information to Bellcore for maintaining the LERG in a timely manner.

2.1.4.7 Qwest shall provide provisioning support outside of scheduled work hours on a nondiscriminatory exception basis as requested by CLEC. Such support may be subject to a minimum labor charge.

2.1.4.8 Service Assurance Warranties and Incentives: Qwest shall provide to CLEC service assurance warranties and incentives as Qwest provides such service warranties and incentives to its own end users or any other Person except as otherwise provided by the Commission.

2.1.4.9 Availability of Network Capacity: Consistent with CLEC's forecasts, Qwest shall deploy and keep deployed network facilities for CLEC services in a non-discriminatory manner and in the same manner as Qwest makes such facilities available to itself for its services.

2.1.4.10 Workcenter Interface Methods and Procedures: Qwest and CLEC shall finalize interface methods and procedures between their respective work centers detailing systems and processes for ordering and provisioning. Such methods and procedures shall be completed within one hundred twenty (120) days after a written request by either Party. The lack of workcenter interface methods and procedures shall not inhibit the provision of services under this Agreement.

2.2 Service Order Process Requirements

2.2.1 [Intentionally left blank for numbering consistency]

2.2.2 Specific Unbundling Requirements

2.2.2.1 When ordering a Combination, CLEC shall have the option of ordering all features, functions and capabilities of each Network Element.

2.2.2.2 When CLEC orders Network Elements, Qwest shall provision all features, functions, and capabilities appropriate to the Network Elements which may include, but are not limited to:

2.2.2.2.1 the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic

capabilities made available to Qwest's Customers, such as telephone number, white page listing, and dial tone; and

2.2.2.2.2 all other features the switch has activated, including, but not limited to, custom calling, custom local area signaling service features and Centrex, as well as any technically feasible customized routing functions provided by the switch.

2.3 Systems Interfaces and Information Exchanges

2.3.1 General Requirements

[Intentionally left blank for numbering consistency]

2.3.2 Pre-Ordering and Provisioning for Resale Services and Unbundled Network Elements

2.3.2.1 Qwest shall provide to CLEC a list of all intraLATA and interLATA carriers available for Customer selection on a central office level.

2.3.2.2 [Intentionally left blank for numbering consistency].

2.3.2.3 Qwest shall provide CLEC with access to Customer Profile Information ("CPI") without requiring CLEC to produce a signed Letter of Authorization ("LOA") subject to proof of authorization requirements described elsewhere in this Agreement, based on CLEC's blanket representation that the Customer has authorized CLEC to obtain such CPI.

2.3.2.3.1 CPI shall be in a mutually agreed to format at the line and/or trunk level. Qwest shall provide to CLEC a real-time, electronic interface to Qwest Customer information systems which will allow CLEC to obtain the Customer profile, which may include, but not be limited to, Customer name, service addresses, billed telephone number(s), and identification of features and services provided by Qwest on the Customer accounts, and to obtain information on all features and services available in the end office where Customer's services are currently provisioned. The preceding information may not include services deemed not to be Telecommunications Services by the Commission.

2.3.2.3.1.1 Until access is available via a real-time, electronic interface for CPI, Qwest agrees that CLEC can obtain CPI in an interim mutually agreed to manner and in accordance with Section 3.2 of this Attachment to facilitate the service order process.

2.3.2.5 Qwest shall provide to CLEC, upon request, a list of all current features and functions technically available from each switch, by switch CLLI. **Planned services shall be provided to CLEC at least thirty (30) days in advance of their availability.**

2.3.2.6 [Intentionally left blank for numbering consistency]

2.3.2.7 Pending or Held Orders: Qwest shall provide, when available, the CLEC information regarding a subscriber's previous pending or held orders. If the subscriber has a pending or held order, the status of the order shall not be negatively impacted as a result of the subscriber changing local service providers (i.e., due date for pending service changed to later date).

2.3.2.8 Special Construction: When Qwest determines that special construction is required, Qwest shall notify CLEC on a timely basis of special construction requirements and charges, and obtain CLEC authorization before beginning such construction.

2.3.3 Pre-Ordering and Provisioning for Unbundling

2.3.3.1 Qwest shall provide to CLEC, upon reasonable request, sufficient engineering design and layout information for Network Elements for specific applications.

2.3.3.2 Qwest shall provide to CLEC, upon request, advance information of the details and requirements for planning and implementing NPA splits in accordance with NANP Guidelines.

2.3.3.3 Qwest shall make engineering support available to CLEC as is normal and customary in the provision of Telecommunications Services, Network Elements, Combinations or Ancillary Functions as described in this Agreement. CLEC may request additional engineering support.

2.4 Pre-ordering Functions¹

"Pre-Ordering" and "Ordering" encompass the preliminary set of activities whereby a service representative interacts with the customer in order to obtain the information required to write a service order and consist of the following functions: verify an address, check service availability, reserve a telephone number, check for appointment availability, reserve an appointment and return customer service information. These functions are described as follows:

2.4.1 Address Verification - Provides CLEC with the ability to query for and receive the customer service location, serving central office, and facility indicators. The facilities indicator will indicate the availability of facilities for one (1) access line at the address, if the cable pair is available or working. If the cable pair is working, an indication of a pending disconnect order and the due date will be provided. This function does not reserve cable pairs.

2.4.2 Telephone Number Reservation - Provides CLEC with the capability to identify if one or more telephone numbers are available and reserve them if available. This includes the ability to reserve one or more specific numbers (vanity numbers), a block of sequential or random block of numbers by serving central office and/or

¹ MCIm Order, pp. 15-16 at Issue 24 and AT&T Order at Issue 41.

NXX. If a work order is not received within a negotiated amount of time, the reservation will automatically expire.

- 2.4.3 Appointment Availability and Reservation** - Provides CLEC with the capability to determine the next available due date, the availability of a specific date, an indication if the date is available or a selection of the next available date, any closed dates beyond that date, and reservation of an available appointment.
- 2.4.4 Service Availability** - Allows CLEC to determine the availability of services and facilities to a specific end-users' location(s). This capability indicates that the service is available, that tariff rates apply, the amounts of any additional recurring and non-recurring costs, and the interval to be used when ordering the service.
- 2.4.5 Customer Service Information Request** - Gives CLEC the ability to request a listing of existing services, features, directory listing and equipment for a customer account.
- 2.4.6 Circuit Identification Request** - Provides CLEC with the capability to identify and obtain circuit identifications. If a work order for a Circuit Identification Request is not received within a negotiated amount of time, the request will automatically expire.

3. Ordering and Provisioning

3.1 General Business Requirements

3.1.1 Ordering and Provisioning Parity

Qwest shall provide CLEC with the same level of ordering and provisioning support as Qwest provides itself in accordance with standards and performance measurements that Qwest uses and/or which are required by law, regulatory agency, or by Qwest's own internal procedures, whichever are the most rigorous. These standards shall apply to the quality of the technology, equipment, facilities, processes, and techniques (including, but not limited to, such new architecture, equipment, facilities, and interfaces as Qwest may deploy) that Qwest provides to CLEC under this Agreement.

3.1.2 Interconnection Service Center (ISC)/Single Point of Contact

3.1.2.1 Qwest shall provide a Systems Interface Help Desk or equivalent which shall serve for all activities involved in the electronic interface for ordering and provisioning of Qwest's unbundled Network Elements, features, functions, and Resale Services. The Systems Interface Help Desk or equivalent shall be available twenty-four (24) hours a day, seven (7) days a week.

3.1.2.2 Qwest shall provide a Single Point of Contact ("SPOC") and shall provide to CLEC toll-free nationwide telephone numbers (available during Qwest's scheduled work hours) answered by competent, knowledgeable personnel, trained to answer questions and resolve problems in connection with the ordering and provisioning of unbundled Network Elements, features, functions,

capabilities, and Resale Services. Qwest will provide sufficient resources to provide equivalent, or as otherwise agreed to by the Parties, service to CLEC.

- 3.1.2.3 In addition to the electronic interfaces provided for elsewhere in this Agreement, Qwest shall provide, as requested by CLEC through the SPOC, provisioning and dispatch in the form of coordinated scheduling, status, and dispatch capabilities equivalent to that which Qwest provides itself or as otherwise agreed to by the Parties.

3.1.3 Carrier Selection

- 3.1.3.1 For Services for Resale or unbundled Network Elements, Qwest shall provide to CLEC, no later than January 1, 1997, the capability to order local service, intraLATA and interLATA toll services by entering CLEC subscriber's choice of carrier on a single order. Qwest will offer other carrier selection choices as they become available. Qwest shall provide CLEC with the capability to order separate interLATA and intraLATA carriers on a line or trunk basis where 1+ presubscription is available.
- 3.1.3.2 Where intraLATA 1+ presubscription is not available, or if the subscriber does not select an intraLATA toll carrier, Qwest agrees to provide intraLATA toll services for resale to CLEC and to recognize the end user as the customer of CLEC for intraLATA toll. CLEC shall designate the default carrier for all other toll calls if the subscriber does not select a carrier. In all cases, Qwest will route toll calls to the appropriate carrier as designated by CLEC.

3.1.4 Notification to Long Distance Carrier

- 3.1.4.1 Qwest will not accept PIC change requests through the CARE process for CLEC local service customers. CLEC's long distance operations may obtain such CARE transactions for CLEC long distance customers from the customer's local service provider. Qwest agrees to notify IXCs using OBF approved CARE transactions, whenever an IXC Customer who is provided local service through Services for Resale, INP/NP, or unbundled Network Elements changes PIC status.
- 3.1.4.2 Qwest shall implement new Transaction Code Status Indicators (TCSIs) 2033, 2233, 3147, and 3148. The new local service provider identification ("LSPID") will be included on these transactions if the new local service provider agrees Qwest should provide the information to a long distance provider as defined by the OBF in support of Local Resale.
- 3.1.4.3 Qwest shall implement TCSIs used in conjunction with the new local service provider ("LSP") identification code for handling account maintenance, customer service, and trouble administration issues. These TCSIs include 4001/02/05, 4201-4205, 4301, 2033, 2233, 3147, 3148, 3149, and others as the OBF may define.

3.1.4.3.1 In addition, Qwest shall implement TCSIs, when available, used in conjunction with the new Ported Telephone Number field to link "shadow" and ported telephone numbers in support of Interim Number Portability. These TCSIs include 2231, 3150, 3151, and others as the OBF may define.

3.1.5 Ordering Interconnection

The Parties agree to utilize the OBF-ASR process for ordering interconnection trunks, which is the same process used to order Access Services. When the ordering Party requests facilities, routing, or optional features different than those determined to be available, the Parties will work cooperatively in determining an acceptable configuration based on available facilities, equipment and routing plans.

3.2 Service Order Process Requirements

3.2.1 OBF Compliance

3.2.1.1 Qwest and CLEC shall generally follow the OBF-developed ordering and provisioning process guidelines. These processes include, but are not limited to, pre-order service inquiry, pre-order service inquiry response, firm order, acknowledgment/rejection, firm order confirmation, delay notification, and completion notification. Qwest agrees to work cooperatively to generally comply with future OBF developed guidelines.

3.2.2 Service Migrations and New Customer Additions

3.2.2.1 For Resale Services, Qwest shall not require a disconnect order from a Customer, another local service provider, or any other entity, to process a CLEC order to establish CLEC Local Service and/or migrate a Customer to CLEC Local Service.

3.2.2.2 For Resale Services, Qwest shall not disconnect any Customer service or existing features available under this Agreement at any time during the migration of that Customer to CLEC service without CLEC's prior agreement.

3.2.2.3 For services provided through unbundled Network Elements, Qwest shall recognize CLEC as an agent for the Customer in coordinating the disconnection of services provided by another CLEC or Qwest.

3.2.2.4 Unless otherwise directed by CLEC, when CLEC orders Resale Services or Network Elements, all trunk or telephone numbers currently associated with existing services shall be retained without loss of feature capability and without loss of associated ancillary services including, but not limited to, Directory Assistance and 911/E911 capability for those services or features which Qwest controls and which are available under this Agreement.

3.2.2.5 For Customer conversions requiring coordinated cut-over activities, Qwest and CLEC will agree on a scheduled conversion time(s), which will be a designated two-hour time period within a designated date. Unless expedited, **Qwest and**

CLEC shall schedule the cut-over window at least forty-eight (48) hours in advance, and as part of the scheduling, Qwest shall estimate for CLEC the duration of any service interruption that the cut-over might cause.² The cut-over time will be defined as a thirty (30) minute window within which both the CLEC and Qwest personnel will make telephone contact to complete the cut-over.

3.2.2.5.1 Qwest will coordinate activities of all Qwest work groups involved with the conversion. This coordination will include, but not be limited to, work centers charged with manual cross-connects, electronic cross-connect mapping, and switch translations (including, but not limited to, implementation of Interim Number Portability translations).

3.2.2.5.2 As soon as possible, but in no event later than one (1) hour after completion, Qwest will notify CLEC when coordinated cut-over is complete.

3.2.2.5.3 End user service interruption shall not exceed twenty (20) minutes during any cut-over. The average interruption caused by the cut-over of CLEC Customers shall not exceed ten (10) minutes. If any service interruption is to exceed twenty (20) minutes, however, Qwest will immediately notify CLEC of such delay.

3.2.2.5.4 Within the appointed thirty (30) minute cut-over time, the Qwest personnel will call the CLEC personnel designated to perform cross-connection work and when the Qwest person is reached in that interval such work will be promptly performed. If the CLEC person is not ready within the appointed interval, and if CLEC had not called to reschedule the work at least two (2) hours prior to the start of the interval, Qwest and CLEC will reschedule the work order and CLEC will pay the non-recurring installation charge for the unbundled loops scheduled for the missed appointment. In addition, non-recurring installation charges for the rescheduled appointment will apply. If the Qwest person is not available or not ready at any time during the thirty (30) minute interval, CLEC and Qwest will reschedule and Qwest will waive the non-recurring charge for the unbundled loops scheduled for that interval. If unusual or unexpected circumstances prolong or extend the time required to accomplish the coordinated cut-over, the Party responsible for such circumstances is responsible for the reasonable labor charges of the other Party. Delays caused by the customer are the responsibility of CLEC. In addition, if CLEC has ordered INP as a part of the unbundled loop installation, Qwest will coordinate implementation of INP with the unbundled loop installation.

3.2.2.6 Service Order: Qwest shall provide CLEC the capability to issue a service order for unbundled Network Elements, Combinations, and Resale Services.

² MCIIm Order, p. 10 at Issue 13.

- 3.2.2.7 PLOC Changes: Qwest shall provide CLEC the capability to transfer a customer with no feature changes to CLEC through a streamlined PLOC (Primary Local Carrier) transfer process.
- 3.2.2.8 Status: Qwest shall provide the CLEC status on a service order when the status of the order changes.
- 3.2.2.9 Modifies: Qwest shall provide CLEC the capability to modify the service order any time after it has been issued; however, Qwest may require the issuance of a supplemental or change order.
- 3.2.2.10 Cancel: Qwest shall provide CLEC the capability to cancel the service order any time after it has been issued.
- 3.2.2.11 Coordinated Service Orders: Qwest shall provide CLEC the capability to relate coordinated services orders, and identify those service orders that require coordination with CLEC, or the subscriber, or the subscriber's vendor. When so identified, Qwest will follow any specific instructions indicated on the service order so that the subscriber's service is not negatively affected by the service turn-up activity.
- 3.2.2.12 Expedite Process: Qwest and CLEC shall mutually develop expedite procedures to be followed when CLEC determines an expedite is required to meet subscriber service needs.
- 3.2.2.13 Expedites: Qwest shall provide CLEC the capability to expedite a service order. Within two (2) business hours after a request from CLEC for an expedited order, Qwest shall notify CLEC of Qwest's confirmation to complete, or not complete, the order within the expedited interval.

3.2.3 Intercept Treatment and Transfer of Service Announcements

- 3.2.3.1 Qwest shall provide unbranded intercept treatment and transfer of service announcements to CLEC Customers. Qwest shall provide such treatment and transfer of service announcement for all service disconnects, suspensions, or transfers, in the same manner as that which Qwest provides to its own end users. Qwest's current standard time periods for providing such announcements is three (3) months for residential service and twelve (12) months for business service. CLEC may request extensions at parity with that which Qwest provides to its end-users.
- 3.2.3.2 Pursuant to this Agreement, CLEC shall provide unbranded intercept treatment and transfer of service announcements to Qwest Customers. CLEC shall provide such treatment and transfer of service announcement for all service disconnects, suspensions, or transfers, at parity with that which CLEC provides its own end users. CLEC standard time periods for providing such announcements is three (3) months for residential service and twelve (12) months for business service. Qwest may request extensions at parity with that which CLEC provides to its end-users.

3.2.4 Due Date

- 3.2.4.1 Qwest and CLEC shall mutually agree on what services and circumstances are subject to the standard interval process to determine the due date or the requested/committed due date process.
- 3.2.4.2 For those services and circumstances that Qwest and CLEC agree shall be handled by the standard interval process, Qwest shall supply CLEC with standard due date intervals on a nondiscriminatory basis to be used by CLEC personnel to determine service installation dates. Under those circumstances Qwest shall complete the provisioning within the standard interval.
 - 3.2.4.2.1 If CLEC requests a due date earlier than the standard due date interval, then expedite charges may apply.
- 3.2.4.3 For those services and circumstances that Qwest and CLEC agree shall be handled by the requested/committed due date process, CLEC may request a due date on each order. Qwest will provide an offered due date on a nondiscriminatory basis. If CLEC accepts the offered due date then such date shall become the committed due date. Qwest will complete the order on the committed due date unless otherwise authorized by CLEC.
 - 3.2.4.3.1 If CLEC requires a due date earlier than the Qwest offered due date and Qwest agrees to meet the CLEC required due date, then that required due date becomes the committed due date and expedite charges may apply.
- 3.2.4.4 Subsequent to an initial order submission, CLEC may request a new/revised due date that is earlier than the committed due date. If Qwest agrees to meet that new/revised due date, then that new/revised due date becomes the committed due date and expedite charges may apply.
- 3.2.4.5 Any special or preferred scheduling options available, internally or externally, to Qwest for ordering and provisioning services shall also be available to CLEC.

3.2.5 Customer Premises Inspections and Installations

- 3.2.5.1 CLEC shall perform or contract for all needs assessments, including equipment and installation requirements, at the Customer premises.
- 3.2.5.2 Qwest shall provide CLEC with the ability to schedule dispatches for work under this Agreement.

- 3.2.5.3 Qwest shall provide, at CLEC's request, extended demarcation beyond the NID using intrabuilding riser and lateral beyond the NID. This provision shall not require Qwest to provide inside wire.

3.2.6 Firm Order Confirmation (FOC)

- 3.2.6.1 Qwest shall provide to CLEC, via an electronic interface, a Firm Order Confirmation ("FOC") for each CLEC order. The FOC shall contain, on a per line and/or trunk basis, an enumeration of CLEC ordered unbundled Network Elements (and the specific Qwest naming convention applied to that Network Element or Combination), features, functions, Resale Services, options, physical interconnection, quantity, and Qwest committed due date for order completion.
- 3.2.6.2 For a revised FOC, Qwest shall provide order detail on a per line or per trunk level basis, as well as the order detail from the prior FOC.

3.2.7 Order Rejections

- 3.2.7.1 Qwest shall reject and return to CLEC any order that Qwest cannot provision, due to technical reasons, missing information, or jeopardy conditions in accordance with Performance Measurements as defined herein. When an order is rejected, Qwest shall, in its rejection notification, specifically describe all of the reasons for which the order was rejected. Qwest shall not reject any orders on account of the requested due date.
- 3.2.7.2 On an exception basis, to the extent that errors cannot be corrected pursuant to electronic interface processes, Qwest agrees to accept verbal order corrections from CLEC. Qwest shall timely inform CLEC by telephone of any minor issues which can be handled over the phone. As required, CLEC will provide a supplemental order reflecting changes to the original service order.

3.2.8 Service Order Changes

- 3.2.8.1 If an installation or other CLEC-ordered work request requires a change from the original CLEC service order in any manner, Qwest shall call CLEC in advance of performing the installation or other work to obtain authorization. Qwest shall then provide CLEC an estimate of additional labor hours and/or materials. After all installation or other work is completed, Qwest shall notify CLEC of actual labor hours and/or materials used in accordance with regular service order completion schedules.
- 3.2.8.1.1 If additional work is completed on a service order, as approved by CLEC, the cost of the additional work must be reported to CLEC in accordance with regular service order completion schedules.
- 3.2.8.1.2 If a service order is partially completed, notification must identify the work that was done and the work remaining to be completed.

- 3.2.8.2 If a CLEC Customer requests a service change at the time of installation or other work being performed by Qwest on behalf of CLEC, Qwest, while at the Customer premises, shall direct the CLEC Customer to contact CLEC so as to avoid unnecessary delays in service activation should the Qwest representative leave Customer premises prior to completing the installation.

3.2.9 Jeopardy Situations

- 3.2.9.1 To the extent jeopardy information is available, Qwest shall provide to CLEC notification of any jeopardy situations prior to the committed due date, missed appointments and any other delay or problem in completing work specified on CLEC service order as detailed on the FOC, in accordance with the Performance Measurements as defined herein.

3.2.10 Cooperative Testing

3.2.10.1 Network Testing

3.2.10.1.1 To the extent that Qwest provides testing for services offered to its end users and to the extent Qwest provides testing for itself, Qwest shall perform all pre-service testing prior to the completion of the CLEC order, including testing on local service facilities and switch translations, including, but not limited to, verification of features, functions, and services ordered by CLEC.

3.2.10.1.2 The Parties agree to cooperate in testing that is required to complete service orders.

3.2.10.2 Systems and Process Testing

3.2.10.2.1 Upon CLEC's request, Qwest shall cooperate with CLEC to ensure that all operational interfaces and processes are in place and functioning properly and efficiently. Testing shall simulate actual operational procedures and systems interfaces to the greatest extent possible. CLEC may request cooperative testing to ensure service performance, reliability, and Customer service ability.

3.2.11 Service Suspensions/Restorations

- 3.2.11.1 For services other than non-switched, upon CLEC's request through a Suspend/Restore Order, Qwest shall suspend or restore the functionality of any Network Element, feature, function, or Resale Service. Qwest shall provide restoration priority on a per Network Element or Combination basis in a manner that conforms with CLEC requested priorities and any applicable regulatory rules and regulations or government requirements.

3.2.12 Disconnects

3.2.12.1 Qwest shall provide to CLEC daily information, in a mutually agreed upon format, notifying CLEC of any services disconnected from CLEC. This report will itemize a change in local service provider or outward line movement on service order activity.

3.2.13 Order Completion Notification

3.2.13.1 Upon completion of a service order by Qwest in its system(s), Qwest shall submit to CLEC an order completion which details the work performed (including a list of features and functions installed), the date completed, charges associated with the order, and verification of accurate service completion. Notification shall be provided in accordance with mutually agreed upon intervals.

3.2.14 [Intentionally left blank for numbering consistency.]

3.2.15 Specific Unbundling Requirements

3.2.15.1 CLEC may order and Qwest shall provision unbundled Network Elements either individually or in any combination on a single order. CLEC may order and Qwest shall provide Unbundled Network Elements without restriction as to how those elements may be rebundled.³

3.2.15.2 Prior to providing service in a specific geographic area or when CLEC requires a change of network configuration, CLEC may elect to place an order with Qwest requiring Qwest to prepare Network Elements and switch translations in advance of orders for additional Network Elements from CLEC.

3.2.15.3 When CLEC orders combinations of currently connected Network Elements, Qwest shall ensure that such Network Elements remain connected and functional without any disconnection or disruption.

3.2.15.4 Order combinations of contiguous Network Elements shall be available to be ordered (a) on a case-by-case basis for those Network Elements that are Customer-specific; or (b) on a common-use (non-end user specific) basis for those Network Elements that are shared by multiple Customers.

3.2.15.5 Individual Network Elements shall be identified and ordered by CLEC so that they can be provisioned together.

3.2.15.6 Qwest shall provide technical assistance to CLEC with respect to unbundled Network Elements pursuant to Section 2.3.3.3 of this Attachment.

³ MCI Order, p. 11 at Issue 14 and AT&T Order, p. 13 at Issue 25.

3.2.15.7 Each order for Network Elements will contain administration, bill, contact, and Customer information, as defined by the OBF.

3.2.15.8 When ordering unbundled switch ports, CLEC is requested to specify the desired signaling (e.g., loop start, ground start or loop reverse battery options).

3.2.15.8.1 To the extent CLEC requires an unbundled loop to provide ISDN, HDSL, ADSL, DS1 service or other channel performance options, such requirements will be identified on the order for unbundled loop service.

3.2.15.8.2 The actual loop facilities provided may utilize various technologies or combinations of technologies. Basic unbundled loops provide an analog facility to CLEC.

3.2.16 Interim Interfaces

3.2.16.1 Qwest will offer interim interfaces via Interconnect Mediated Access as documented in Document Number T-12-99-116472-00-02, current as of the Effective Date of this Agreement, or as mutually agreed to by the Parties.

3.2.16.2 Until the electronic interface described in Section 3.2.16.1 is available for the required services, Qwest agrees that the Interconnect Service Center (ISC) or similar function will accept CLEC orders. Orders will be transmitted to the ISC via mutually agreed procedures.

3.2.16.3 Until industry standards are completed and implemented pursuant to Section 3.3.2 of this Attachment, Qwest and CLEC agree to use interim interfaces as described in Section 3.2.16.1 above.

3.2.17 Ordering and Maintenance

3.2.17.1 For the purpose of ordering unbundled Network Elements or Combinations, CLEC shall provide a blanket letter of authorization to Qwest indicating that it shall be duly authorized by its customer to process such service orders.

3.2.17.2 If there is a conflict between an end user (and/or its respective agent) and CLEC regarding the disconnection or provision of unbundled Network Elements or Combinations, Qwest will honor the latest dated proof of authorization designating an agent by the end user or its respective agent. Compensation for unauthorized disconnections or transfers shall be in accordance with § 258 of the Act or by Commission rule.

3.2.17.3 CLEC has primary responsibility for its own end user base and will have the responsibility for resolution of any service trouble report(s) from its customers. Qwest will work cooperatively with CLEC to resolve trouble reports when the trouble condition has been isolated and found to be within a portion of Qwest's network. Where available, CLEC must provide to Qwest switch-based test results when testing its customer's trouble prior to

Qwest performing any repair functions. The Parties will cooperate in developing mutually acceptable test reports.

3.2.17.4 In the event of a transfer of the end user's service for unbundled Network Elements from one provider to CLEC, CLEC shall issue a request for transfer of service to Qwest and the provider from whom the service is being transferred. In the event of a transfer of the end user's service for unbundled Network Elements from CLEC to another provider, CLEC shall submit to Qwest a disconnect order for such unbundled Network Elements or Combinations to facilitate the cessation of billing by Qwest. The Parties agree to develop procedures to handle the transfer of an end user service from one provider to another.

3.2.17.5 [Intentionally left blank for numbering consistency.]

3.2.17.6 When ordering unbundled loops, CLEC is responsible for obtaining or providing facilities and equipment that are compatible with the loop.

3.2.17.7 To the extent a Qwest provided unbundled loop is provisioned without Qwest provided unbundled switching, CLEC will have responsibility for testing the unbundled loop. If, at CLEC's request, Qwest must dispatch to perform tests on an unbundled loop, and the fault is not in Qwest facilities, a charge may apply.

3.2.17.8 To the extent a Qwest provided unbundled loop is provisioned without unbundled Qwest-provided unbundled switching, CLEC will be responsible for providing the CLEC switch interface, if applicable, on the Qwest MDF interface to facilitate plant test.

3.3 Systems Interfaces and Information Exchanges

3.3.1⁴ Interim Requirements for Operational Support Systems

In accordance with Section 271 of the Act, Qwest shall provide CLEC with interfaces to access Qwest's databases and associated signaling necessary for the routing and completion of CLEC traffic. Except where otherwise specified, access to such databases, and the appropriate interfaces, shall be made available to CLEC via a Bona Fide Request. The costs will be recovered through prices based on TELRIC or other method to be decided upon by the Commission.

3.3.1.1 Operational Systems Interfaces - Interface Implementation Timetable

3.3.1.1.1 Qwest's initial operational systems interfaces deployment on January 1, 1997, will support Pre-ordering, Ordering, Provisioning and Repair capabilities for POTS (non-design) services and billing capabilities for most Qwest product offerings. Subsequent phases of

⁴ MCI Order, pp. 15-16 at Issues 24-27 and AT&T Order at Issue 41.

the plan incorporate the capabilities to support designed services for Pre-ordering, Ordering, Provisioning, and Maintenance and Repair. Time frames for delivery of the operational support systems for designed services are estimated to be in the 2nd and 3rd quarters of 1997.

3.3.1.1.2 Qwest will develop long term mediated access pursuant to the Joint Implementation Agreement.

3.3.1.1.3 Qwest shall abide by the implementation schedule and the representation made within testimony presented in Commission Docket Nos. U-3175-96-479 and E-1051-96-479 in deploying its initial interfaces. Qwest shall regularly inform CLEC of its progress in implementing the interfaces, and shall allow CLEC to test the interfaces and participate in their planning. If Qwest does not fulfill the terms of its representations, it may be liable to CLEC for compensation for damages and costs due to Qwest's failure to comply with its representations.

3.3.1.2 OSS Interface Design

3.3.1.2.1 Qwest will develop OSS interfaces using an electronic gateway solution consistent with the design prescribed by the FCC Interconnection Order at paragraph 527. These gateways will act as a mediation or control point between CLEC and Qwest's Operations Systems. Additionally, these gateways will provide security for the interface, protecting the integrity of the Qwest network and its databases, and ensuring that information privacy is maintained.

3.3.1.2.2 Baseline gateway architecture will initially incorporate a "World Wide Web"- based, human-readable format for the transaction-type interfaces to meet the needs of CLEC. Different batch-type interfaces will be proposed in selected areas based on existing standards for their application. Qwest will offer a machine-to-machine based protocol interface (e.g., CMIP) pursuant to the Joint Implementation Agreement.

3.3.1.2.3 Qwest proposes the use of the existing Electronic Data Interchange (EDI) standard for the transmission of monthly local billing information. EDI is an established standard under the auspices of the American National Standards Institute/Accredited Standards Committee (ANSI/ASC) X12 Committee. A proper subset of this specification has been adopted by the Telecommunications Industry Forum (TCIF) as the "811 Guidelines" specifically for the purposes of telecommunications billing.

3.3.1.2.4 For the exchange of daily usage data, including third party billed, collect, and card calls, Qwest will use the Bellcore EMR format

for the records, using the Connect Direct, otherwise also known as the Connect:Direct method to transmit the information to carriers.

3.3.1.2.5 For the exchange of Centralized Message Distribution System ("CMDs") data, Qwest will use the existing CMDs record format, and again will use the Connect Direct method to transmit the information to carriers.

3.3.1.3 Provisioning

When the "pre-ordering" and "ordering" steps are completed, the requisite information will have been obtained from the customer and the initiation of a work order can begin. Submitting a work order will result in the provisioning and installation, if necessary, of a customer's service. The functional set required to order service is: open a work order, cancel a work order, change a work order, send a firm order confirmation, send notification of order jeopardy, send notification of status change, and send notification of order completion.

3.3.1.3.1 Work Order Request & Receipt

Enables CLEC to submit a work request indicating the actions required for the provisioning of products, services and features, acknowledges the receipt of the work order, and includes the date and time the transaction was received.

3.3.1.3.2 Work Order Change & Cancellation

Enables CLEC to submit a change request or cancellation notice in order to modify a previously submitted work order.

3.3.1.3.3 Status Query

Gives CLEC the ability to determine the current status of orders and will include the due date and remarks pertinent to the order status.

3.3.1.3.4 Jeopardy Notification & Response

Provides CLEC with a notification that the requested due date cannot be met for a non-confirmed order or that there is a critical date in jeopardy for a confirmed order and will accept CLEC response indicating the action to be taken on the jeopardy notification.

3.3.1.3.5 Firm Order Confirmation

Provides CLEC with a confirmation that the work order has been accepted and is anticipated to be completed by the due date. If the due date cannot be met, CLEC will receive a Jeopardy Notification, not a Firm Order Confirmation.

3.3.1.3.6 Work Order Completion

Provides CLEC notification that the order has been completed, including a summary of the account containing directory information, services, associated features, and recurring and non-recurring charges.

3.3.2 Permanent Access to Systems Interfaces

3.3.2.1 Qwest shall provide to CLEC a real-time, electronic interface(s) for transferring and receiving information and executing service pre-ordering, ordering, provisioning, maintenance and repair transactions for unbundled Network Elements and Resale Services, and any other database access required by FCC rules and regulations. In addition, Qwest shall also provide the electronic interfaces specified in this Agreement which support business processes or database access. The interface(s) shall be capable of supporting all of the steps in the OBF developed ordering and provisioning process. These steps include pre-order service inquiry, pre-order service inquiry response, firm order acknowledgment/rejection, firm order confirmation, and completion notification.

3.3.2.1.1 The Parties will jointly review each OBF standard upon completion. The review shall be completed within thirty (30) days, unless otherwise agreed to by the Parties. The review shall result in a mutual agreement on whether the new standard will be deployed. Within thirty (30) days of agreement to deploy the new standard, the Parties shall agree on a schedule for such deployment.

3.3.2.2 Qwest shall provide CLEC a common electronic interface that will permit the transmittal of business and residential transactions.

3.3.3 Ordering and Provisioning for Resale Services

Qwest shall provide a real time electronic interface with at least the following specifications:

3.3.3.1 Qwest shall provide to CLEC a real-time, electronic interface to Qwest information systems to allow CLEC to assign telephone number(s) (if the Customer does not already have a telephone number or requests a change of telephone number).

3.3.3.2 For Resale Services not subject to standard intervals, Qwest shall provide to CLEC a real-time, electronic interface to schedule dispatch and installation appointments.

3.3.3.3 Qwest shall provide to CLEC a real-time, electronic interface to Qwest Customer information systems which will allow CLEC to determine if a service call is needed to install the line or service.

- 3.3.3.5 Qwest shall provide to CLEC a real-time, electronic interface which transmits status information on service orders.

3.3.4 Ordering and Provisioning for Unbundling

- 3.3.4.1 For unbundled Network Elements not subject to standard intervals, Qwest shall provide to CLEC, when available, a real-time, electronic interface which will allow CLEC to schedule appointments, and adjust pending order due dates in real-time.
- 3.3.4.2 Qwest shall provide CLEC with results from mechanized loop tests.
- 3.3.4.3 Qwest shall provide CLEC with confirmation of circuit assignments.

3.4 Standards

3.4.1 General Requirements

- 3.4.1.1 CLEC and Qwest shall agree upon the appropriate ordering and provisioning codes to be used for each Network Element or Combinations thereof. These codes shall apply to all aspects of the unbundling of that Network Element or Combination of Network Elements and shall be known as data elements as defined by the Telecommunications Industry Forum Electronic Data Interchange Service Order Subcommittee (TCIF-EDI-SOSC), or as mutually agreed.

3.5 Performance Measurements and Reporting

[Intentionally left blank for numbering consistency]

3.5.2 Quality Measurements

[Intentionally left blank for numbering consistency]

3.5.3 Reporting

[Intentionally left blank for numbering consistency]

4. Connectivity Billing and Recording

This Section 4 describes the requirements for Qwest to bill and record all charges CLEC incurs for purchasing services under this Agreement.

4.1 Procedures

- 4.1.1 The Parties recognize that deviations and discrepancies may occur from the various industry standards and other standards referenced in this Agreement. Subject to such

discrepancies and deviations, Qwest shall comply with these various standards. Discrepancies and deviations will be documented and reviewed.

- 4.1.1.1 Within forty-five (45) days after the Effective Date of this Agreement, the Parties will develop processes by which Qwest will inform CLEC of deviations from standards for billing. The Parties agree that they will negotiate discrepancies and deviations in good faith. Further, the Parties agree that those documented deviations from such standards documented by Qwest to CLEC shall supersede sections of technical standards applicable to such deviations referenced in this Agreement.
- 4.1.2 Qwest shall record and bill in accordance with this Agreement those charges CLEC incurs as a result of CLEC purchasing from Qwest services, as set forth in this Agreement (hereinafter "Connectivity Charges").
- 4.1.3 **Qwest shall format each bill for Connectivity Charges (hereinafter "Connectivity Bill") in accordance with the CRIS, CABS or SECAB standard as appropriate to the services billed.⁵**
- 4.1.4 Each service purchased by CLEC shall be assigned a separate and unique billing code or identifier in the form agreed to by the Parties and such code or identifier shall be provided to CLEC on each Connectivity Bill in which charges for such services appear. Each such billing code or identifier shall enable CLEC to identify the service as purchased by CLEC.
- 4.1.5 Each Connectivity Bill shall set forth the quantity and description of each such service provided and billed to CLEC. All Connectivity Charges billed to CLEC shall indicate the state from which such charges were incurred.
- 4.1.6 Qwest shall bill CLEC for each service supplied by Qwest to CLEC pursuant to this Agreement at the rates set forth in Attachment 1 to this Agreement.
- 4.1.7 Qwest shall bill CLEC for the Connectivity Charges incurred; provided, however, that for those usage-based Connectivity Charges where actual charge information is not determinable by Qwest because the jurisdiction (i.e., interstate, interstate/interLATA, intrastate, intrastate/ intraLATA, local) of the traffic is unidentifiable, or for any other reason, the Parties shall jointly develop a process to determine the appropriate charges.
- 4.1.8 Measurement of usage-based Connectivity Charges shall be in actual conversation seconds. For local interconnection traffic provided under Attachments 3 and 4 of this Agreement, the total conversation time per chargeable traffic types shall be totaled for the entire monthly bill cycle, rounded to the next whole minute and then billed at the contract rate. For Resale services provided under Attachment 2 of this Agreement, the total conversation time shall be measured in accordance with Qwest's retail tariff and billed at the contract rate.

⁵ Procedural Order, July 14, 1997, pages 18-19.

- 4.1.9 Qwest shall provide to CLEC, at no additional charge, a Single Point of Contact for handling any Connectivity Billing questions or problems that may arise during the implementation and performance of the terms and conditions of this Agreement.
- 4.1.10 Qwest shall provide a Single Point of Contact for the handling of any data exchange questions or problems that may arise during the implementation and performance of the terms and conditions of this Agreement.
- 4.1.11 As soon as possible after the Effective Date of this Agreement, each Party shall provide the other Party written notice of which form of the monthly Connectivity Bill is to be deemed the official bill to assist the Parties in resolving any conflicts that may arise between the official bill and another form of bill received via a different media which purportedly contains the same charges as are on the official bill.
- 4.1.12 If either Party requests an additional copy(ies) of a bill, such Party shall pay the other Party a reasonable fee per additional bill copy, unless such copy was requested due to errors, omissions, or corrections or the failure of the transmission to comply with the specifications set forth in this Agreement.
- 4.1.13 When sending Connectivity Bills via electronic transmission, to avoid transmission failures or the receipt of Connectivity Billing information that cannot be processed, CLEC shall provide Qwest process specifications. Qwest shall comply with mutually agreed upon processing specifications when Qwest transmits Connectivity Billing data to CLEC. CLEC shall provide to Qwest notice if a Connectivity Billing transmission is received that does not meet mutually agreed upon CLEC specifications. Faulty or failed transmissions shall be corrected and resubmitted to CLEC, at Qwest's sole expense.
- 4.1.14 Qwest shall deliver to a location specified by CLEC, billing information via Connect Direct, magnetic tape or paper, as agreed to by CLEC and Qwest. In the event of an emergency, system failure or other such condition which prevents Qwest from transmitting via Connect Direct, Qwest shall notify CLEC of such difficulties within two (2) hours of detection. Qwest shall deliver to, a location specified by CLEC, billing information via magnetic tape or paper, as agreed to by CLEC and Qwest. The Parties acknowledge that all tapes transmitted to the other Party via U.S. Mail or overnight delivery service and which contain Connectivity Billing data shall not be returned to the sending party.
- 4.1.15 [Intentionally left blank for numbering consistency]
- 4.1.16 Billed amounts which are being reasonably disputed or reasonably queried or for which reasonable claims have been filed, are not due for payment until such disputes, claims or queries have been fully resolved by both CLEC and Qwest.
- 4.1.17 [Intentionally left blank for numbering consistency]
- 4.1.18 Bill Reconciliation**
 - 4.1.18.1 Each Party agrees to notify the other Party upon the discovery of a billing discrepancy ("Notice of Discrepancy").

- 4.1.18.2 In the event of such Notice of Discrepancy, the Parties shall endeavor to resolve the discrepancy within sixty (60) calendar days after the Notice of Discrepancy is issued using normal business procedures. If the discrepancy is disputed, resolution of such dispute is expected to occur at the first level of management resulting in a recommendation for settlement of the dispute and closure of a specific billing period.
- 4.1.18.3 Closure of a specific billing period shall occur by joint agreement of the Parties whereby the Parties agree that such billing period is closed to any further analysis and financial transactions, except those resulting from an Audit. Closure shall take place within nine (9) months of the Bill Date. The month being closed represents those Connectivity Charges that were billed or should have been billed by the applicable bill date.
- 4.1.18.4 If the dispute is not resolved within the allotted time frame, the following resolution procedure shall begin:
 - 4.1.18.4.1 If the dispute is not resolved within sixty (60) days of the Notice of Discrepancy, the dispute shall be escalated to the second level of management for resolution.
 - 4.1.18.4.2 If the dispute is not resolved within ninety (90) days of Notice of Discrepancy, the dispute shall be escalated to the third level of management for resolution.
 - 4.1.18.4.3 If the dispute is not resolved within one hundred and twenty (120) days of the Notice of Discrepancy, upon the written request of either Party within such one hundred and twenty (120) day period, the dispute may be resolved pursuant to the dispute resolution provision set forth in Part A of this Agreement.
- 4.1.19 Qwest shall reimburse CLEC for incorrect Connectivity Billing charges, including, without limitation, overcharges, services ordered or requested but not delivered, interrupted services, and services of poor quality and installation problems, if such problems are caused by Qwest. Such reimbursements shall be set forth in the appropriate section of the Connectivity Bill pursuant to appropriate standards.
- 4.1.20 The Parties agree to record call information in accordance with this Section 4.1. To the extent technically feasible, each Party shall record all call detail information associated with every call that one Party bills to the other Party. CLEC may request, through the Bona Fide Request process the recording of call records and/or call detail information that is not currently recorded by Qwest. These records shall be provided and retained pursuant to Section 5 of this Attachment.
- 4.1.21 When CLEC collocates with Qwest in Qwest's facility as described in this Agreement, capital expenditures (e.g., costs associated with building the "cage"), shall not be included in the Connectivity Bill provided to CLEC pursuant to this Attachment 5. All

such capital expenses shall be given a unique BAN and invoice number. All invoices for capital expenses shall be sent to the location specified by CLEC for payment. All other non-capital recurring collocation expenses shall be billed to CLEC in accordance with this Agreement. The CABS/SECABS Billing Output Specifications (BOS) documents provide the guidelines on how to bill the Connectivity Charges associated with collocation.

4.1.22 Local Number Portability

- 4.1.22.1 In accordance with the terms and conditions set forth in this Agreement, Qwest shall record and provide to CLEC all detail information associated with an alternately billed call to a CLEC local exchange customer whose telephone number has been ported from Qwest under INP as further described in this Agreement.

4.1.23 Meet Point Billing

- 4.1.23.1 CLEC and Qwest will establish meet-point billing ("MPB") arrangements in accordance with the Meet Point Billing guidelines adopted by and contained in the OBF's MECAB and MECOD documents, except as otherwise mutually agreed to by the Parties. Both Parties will use their best reasonable efforts, individually and collectively, to maintain provisions in their respective federal and state access tariffs, and/or provisions within the National Exchange Carrier Association (NECA) Tariff No. 4, or any successor tariff to reflect the MPB arrangements identified in this Agreement, in MECAB and in MECOD.
- 4.1.23.2 The Parties will agree on a meet point percentage to enable the joint provisioning and billing of Switched Access Services to third parties in conformance with the Meet Point Billing guidelines adopted by and contained in the OBF's MECAB and MECOD documents and referenced in Qwest's Switched Access Tariffs. The Parties understand and agree that MPB arrangements are available and functional only to/from IXCs who directly connect with the tandem(s) that CLEC sub-tends in each LATA.
- 4.1.23.3 The Parties will use reasonable efforts, individually and collectively, to maintain provisions in their respective federal and state access tariffs, and/or provisions within the National Exchange Carrier Association (NECA) Tariff No. 4, or any successor tariff, sufficient to reflect this MPB arrangement, including MPB percentages.
- 4.1.23.4 CLEC and Qwest will implement the "Multiple Bill/Single Tariff" option in order to bill any interexchange carrier (IXC) for that portion of the network elements provided by CLEC and Qwest. For all traffic carried over the MPB arrangement, CLEC and Qwest shall bill IXCs for all applicable elements at the rates specified in their respective tariffs.
- 4.1.23.5 Qwest shall provide to CLEC the billing name, billing address, and carrier identification code (CIC) of the IXCs that may utilize any portion of CLEC

network in a CLEC/Qwest MPB arrangement in order to comply with the MPB notification process as outlined in the MECAB document. Such information shall be provided to CLEC in the format and via the medium that the Parties agree. If Qwest does not have a CIC for any IXC that will utilize a portion of CLEC network in a CLEC/Qwest MPB arrangement, and for whom Qwest must supply to CLEC MPB billing information, then until such carrier has obtained a CIC, Qwest will submit the LEC's CIC on those MPB records provided to CLEC for MPB. Qwest understands and agrees that it will be solely responsible for obtaining any reimbursements from such carriers who have utilized the jointly provided networks of Qwest and CLEC.

- 4.1.23.6 Qwest and CLEC agree that in an MPB arrangement where one Party provides local transport and the other Party provides the end office switching, the Party who provides the end office switching is entitled to bill any residual interconnection charges (RIC) and common carrier line (CCL) charges associated with the traffic. The Parties further agree that in those MPB situations where one Party sub-tends the other Party's access tandem, the Party providing the access tandem is only entitled to bill the access tandem fee and any associated local transport charges. The Parties also agree that the Party who provides the end office switching is entitled to bill end office switching fees, local transport charges, RIC and CCL charges, as appropriate, and such other applicable charges.
- 4.1.23.7 Qwest and CLEC will record and transmit MPB information in accordance with the standards and in the format set forth in this Attachment. Qwest and CLEC will coordinate and exchange the billing account reference ("BAR") and billing account cross reference (BACR) numbers for the MPB arrangements described in this Agreement. Each Party will notify the other if the level of billing or other BAR/BACR elements change, resulting in a new BAR/BACR number.
- 4.1.23.8 If MPB data is not processed and delivered by either Qwest or CLEC and sent to the other Party within ten (10) calendar days of the relevant recording period and in turn such Party is unable to bill the IXC for the appropriate charges, the Party who failed to deliver the data will be held liable for the amount of the unbillable charges.
- 4.1.23.9 If MPB data is not submitted within ten (10) calendar days of the relevant recording period or is not in the proper format as set forth in this Agreement, and if as a result the other Party is delayed in billing the IXC for the appropriate charges it incurs, the delaying Party shall pay the other Party a late MPB data delivery charge which will be the total amount of the delayed charges times a monthly rate that shall not exceed 1.5% which may be levied by law for commercial transactions, compounded daily for the number of days from the date the MPB charges should have been received to and including the date the MPB charge information is actually received.

- 4.1.23.10 Errors in MPB data exchange by the Parties may be discovered by CLEC, Qwest or the billable IXC. Both CLEC and Qwest agree to provide the other Party with notification of any discovered errors within two (2) Business Days of the discovery. The other Party shall correct the error within eight (8) Business Days of notification and resubmit the data. In the event the errors cannot be corrected within the time period specified above, the erroneous data shall be considered lost. If MPB data is lost due to uncorrectable errors or otherwise, the Parties shall follow the procedures set forth in Section 5 of this Attachment and compensate the other for the lost MPB billing data.
- 4.1.23.11 In the event CLEC purchases from Qwest Network Elements, or Combination thereof, in a LATA other than the LATA to or from which the MPB services are homed and in which Qwest operates an access tandem, Qwest shall, except in instances of capacity limitations, permit and enable CLEC to sub-tend the Qwest access tandem switch(es) nearest to the CLEC rating point(s) associated with the NPA-NXX(s) to/from which the MPB services are homed. In such event, CLEC shall be responsible for the transport facilities crossing LATA boundaries. In instances of capacity limitation at a given access tandem switch, CLEC shall be allowed to subtend to the next nearest Qwest access tandem switch in which sufficient capacity is available. The MPB percentages for each new rating point/access tandem pair shall be calculated in accordance with MECAB and MECOD.

4.2 Information Exchange and Interfaces

- 4.2.1 Qwest shall provide CLEC a monthly Connectivity Bill that includes all Connectivity Charges incurred by and credits and/or adjustments due to CLEC for those services ordered, established, utilized, discontinued or performed pursuant to this Agreement. For each account, Qwest shall issue one (1) bill per month and the billing cycle shall be on a calendar basis. Each Connectivity Bill provided by Qwest to CLEC shall include:
- 4.2.1.1 all non-usage sensitive charges incurred for the current bill period.
 - 4.2.1.2 any known unbilled non-usage sensitive charges for prior periods;
 - 4.2.1.3 usage sensitive charges for the current relevant bill period (from the last bill date and extending up to, and including, the current bill date);
 - 4.2.1.4 any known unbilled usage sensitive charges for prior periods; and
 - 4.2.1.5 any known unbilled adjustments.
- 4.2.3 The bill date must be present on each bill transmitted by Qwest to CLEC, must be a valid calendar date, and not more than ninety (90) days old. Connectivity Bills shall not be rendered for any Connectivity Charges which are incurred under this Agreement on or before two hundred and seventy (270) days preceding the bill date, except as otherwise permitted by law.

- 4.2.4 On each bill where "Jurisdiction" is identified, local and local toll charges shall be identified as "Local" and not as interstate, interstate/interLATA, intrastate, or intrastate/intraLATA. Qwest shall provide from and through dates for charges rendered on all Connectivity Bills.
- 4.2.5 Qwest shall separately identify business charges from residence charges, as appropriate, and shall assign a specific adjustment or reference number provided by CLEC to each adjustment and credit included on the Connectivity Bill.
- 4.2.6 Qwest and CLEC shall issue all Connectivity Bills in accordance with the terms and conditions set forth in this Section 4. On Connectivity Bills Qwest renders to CLEC, Billing Account Numbers (BANs) shall be thirteen (13) character alpha/numeric and there shall only be one (1) BAN per State unless otherwise agreed to by the Parties. The Bill Date shall be the same day month to month. Each Party shall provide the other Party at least thirty (30) calendar days written notice prior to changing, adding or deleting a BAN. The Parties shall provide one (1) Connectivity Billing invoice associated with each BAN. Each invoice must contain an invoice number, which will vary from month to month. On each bill associated with a BAN, the appropriate invoice number and the charges contained on such invoice must be reflected. All Connectivity Bills must be received by the other Party no later than ten (10) calendar days from the bill date and at least thirty-five (35) calendar days prior to the payment due date (as described in Part A of this Agreement), whichever is earlier. Any Connectivity Bill received on a Saturday, Sunday or a day designated as a bank holiday will be deemed received the next Business Day. If either Party fails to receive Connectivity Billing data and information within the time period specified above, then the payment due date will be extended by the number of days receipt has been delayed.
- 4.2.7 Qwest shall issue all Connectivity Bills containing such billing data and information in accordance with the most current version of CRIS or CABS/SECABS published by Bellcore, or its successor, or such later versions as are adopted by Bellcore, or its successor, as appropriate to the services being billed. To the extent there are no CRIS, CABS, or SECAB standards governing the formatting of certain data, such data shall be issued in the format mutually agreed to by Qwest and CLEC, and in accordance with Attachment 6 to this Agreement.⁶
- 4.2.8 As detailed in the MECAB document, CLEC and Qwest will exchange all information necessary to bill third parties for switched access services traffic jointly handled by CLEC and Qwest via the meet point arrangement in a timely fashion. Information shall be exchanged in Exchange Message Record ("EMR") format (Bellcore Standard BR 010-200-010, as amended) on magnetic tape or via a mutually acceptable electronic file transfer protocol. The Parties will exchange records pursuant to this paragraph without additional compensation.

⁶ Procedural Order, July 14, 1997, pages 18-19.

- 4.2.9 Qwest and CLEC agree that each Party shall transmit Connectivity Billing information and data in the appropriate format as provided herein, electronically via Connect Direct to the other Party at the location specified by such Party. CLEC data centers will be responsible for originating the calls for data transmission. Qwest shall transmit in accordance with the technical specifications mutually agreed upon by the Parties. CLEC will supply to Qwest its RACF ID and password before the first transmission of data via Connect Direct. Any changes to either Party's Connect Direct Node ID must be sent to the other Party no later than thirty (30) calendar days before the changes take effect.
- 4.2.10 In emergency situations when tape transmittal has been used, Qwest shall adhere to the tape packaging requirements set forth in this Agreement. Where magnetic tape shipping containers are transported in freight compartments, adequate magnetic field protection shall be provided by keeping a 6-inch distance from any magnetic field generating device (except a magnetron-tape device). Qwest shall only use those shipping containers that contain internal insulation to prevent damage. Qwest shall clearly mark on the outside of each shipping container its name, contact and return address. Qwest shall not ship any Connectivity Billing tapes in unprotected tape canisters.
- 4.2.11 All emergency billing data transmitted via tape must be provided on a cartridge (cassette) tape and must be of high quality, conform to the Parties' record and label standards, 9-track, odd parity, 6250 BPI group coded recording mode and extended binary-coded decimal interchange code (EBCDIC). Each reel of tape must be 100% tested at 20% or better "clipping" level with full width certification and permanent error free at final inspection. CLEC reserves the right to destroy a tape that has been determined to have unrecoverable errors. CLEC also reserves the right to replace a tape with one of equal or better quality.
- 4.2.12 The header record will be formatted in accordance with the appropriate IBM, CABS or EDI standards as mutually agreed upon by the Parties.
- 4.2.13 A single 6-digit serial number must appear on the external (flat) surface of the tape for visual identification. This number shall also appear in the "dataset serial number field" of the first header record of the IBM standard tape label. This serial number shall consist of the character "V" followed by the reporting location's four digit Originating Company Code and a numeric character chosen by the sending Party. The external and internal label shall be the same. The dataset name shall appear on the flat side of the reel and also in the "data set name field" on the first header record of the IBM standard tape label. Qwest's name, address, and contact shall appear on the flat side of the cartridge or reel.
- 4.2.14 Tape labels shall conform to IBM OSVS Operating System Standards contained in the IBM Standard Labels Manual. IBM standard labels are 80-character records recorded in EBCDIC, odd parity.
- 4.2.15 Qwest shall conform to the Standard Volume Label Format which will be mutually agreed upon by the Parties.

4.2.16 Qwest shall use the IBM Standard Dataset Label Format which will be mutually agreed upon by the Parties.

4.2.17 Qwest shall use test and production dataset format which will be mutually agreed upon for all Connectivity Bills.

4.2.18⁷ Interim Billing Interfaces Processes

Qwest offers interfaces for the exchange of several types of billing data: Monthly Billing Information, Daily Usage Data, Local Account Maintenance Report, Centralized Message Distribution System (CMDS) messages, Routing of in-region intraLATA collect, calling card, and third number billed messages.

4.2.18.1 Monthly Billing Information

Includes all connectivity charges, credits, and adjustments related to Network Elements and Qwest-provided local service.

4.2.18.2 Daily Usage Data

The accumulated set of call information for a given day as captured, or "recorded," by the network switches. Qwest will provide this data to CLEC with the same level of precision and accuracy it provides itself. Such precision cannot and will not exceed the current capabilities of the software in the switches as of the Effective Date of this Agreement.

4.2.18.3 Local Account Maintenance Report

A report, consisting of the list of phone numbers to which the carrier started providing service since the last report, and the list of phone numbers to which the carrier is no longer providing service since the last report.

4.2.18.4 Centralized Message Distribution System ("CMDS")

Distribution of CMDS messages for CLEC customers

4.2.18.5 Routing of In-region intraLATA Collect, Calling Card, and Third Number Billed Messages

Qwest will distribute in-region intraLATA collect, calling card, and third number billed messages to CLEC and exchange with other CLECs operating in-region in a manner consistent with existing inter-company processing agreements. Whenever the daily usage information is transmitted to a carrier, it will contain the records for these types of calls as well.

⁷ MCIm Order, pp. 15-16 at Issue 27 and AT&T Order at Issue 41.

4.3 Standards

- 4.3.1 At least thirty (30) calendar days prior to Qwest sending CLEC a mechanized bill for the first time via electronic transmission, Qwest shall send to CLEC Connectivity Bill data in the appropriate mechanized format (e.g., CABS or SECAB) for testing to ensure that bills can be processed and that bills comply with the requirements of this Attachment. After receipt of the test data from Qwest, CLEC will notify Qwest if the connectivity billing transmission meets CLEC testing specifications. If the transmission fails to meet the mutually agreed upon test and production dataset format, then, Qwest shall make the necessary corrections within a mutually agreeable time frame. At least three (3) sets of testing data must meet CLEC testing specifications prior to Qwest sending CLEC a mechanized production connectivity bill for the first time via electronic transmission or tape. Thereafter, Qwest may begin sending CLEC production connectivity bills via electronic transfer on the next bill date, or within ten (10) calendar days, whichever is later.
- 4.3.2 Qwest shall also provide to CLEC's designated point of contact, Qwest's applicable operating company number ("OCN") at least thirty (30) days prior to testing and at least thirty (30) days prior to a change of OCN.
- 4.3.3 At least ninety (90) days prior to any change in existing formats or change to a different format, Qwest shall send to CLEC Connectivity Bill data in the appropriate mechanized format for testing to ensure that the bills can be processed and that the bills comply with the requirements of this Attachment. Qwest agrees that it shall not send to CLEC bill data in the new mechanized format until such bill data has met the testing specifications as set forth in this Section.
- 4.3.4 During the testing period, in addition to CONNECT DIRECT, Qwest shall also transmit to CLEC Connectivity Billing data and information via paper or tape as specified by CLEC. Test tapes shall be sent to a CLEC specified location.
- 4.3.5 For Connectivity Bills issued in CABS or SECAB format, Qwest agrees that if it transmits data to CLEC in a mechanized format, Qwest shall also comply with the following specifications which are not contained in CABS or SECAB guidelines but which are necessary for CLEC to process Connectivity Billing information and data:
- 4.3.5.1 The bill date shall not contain spaces or non-numeric values.
- 4.3.5.2 Each Connectivity Bill must contain at least one (1) detail record.
- 4.3.5.3 Any "from" date should be less than or equal to the associated "thru" date and neither date can contain spaces.
- 4.3.5.4 The invoice number must not have embedded spaces or low values.
- 4.3.6 Qwest agrees that in order to ensure the proper performance and integrity of the entire Connectivity Billing process, Qwest shall be responsible and accountable for transmitting to CLEC an accurate and current bill. Qwest agrees to implement control

mechanisms and procedures to render a bill that accurately reflects the services ordered and used by CLEC.

5. Provision Of Customer Usage Data

This Section 5 sets forth the terms and conditions for Qwest's provision of Recorded Usage Data (as defined in this Attachment 5) to CLEC and for information exchange regarding long distance billing.

5.1 Procedures

5.1.1 General

- 5.1.1.1 Qwest shall comply with various industry, OBF, and other standards referred to throughout this Agreement. To satisfy these requirements, the Parties agree to a mutual interpretation of all standards referred to in this Section.
- 5.1.1.2 The Parties shall mutually agree to OBF standards and the additional standards outlined in this Agreement when recording and transmitting Usage Data.
- 5.1.1.3 As new standards are developed and adopted by industry, Qwest and CLEC will negotiate mutually agreeable implementation of those standards.
- 5.1.1.4 Qwest shall record all usage to be billed to CLEC originating from, terminating to or billed to CLEC Customers using Qwest services ordered by CLEC. Recorded Usage Data includes, but is not limited to, the following categories of information:
 - Call attempts
 - Completed calls
 - Use of CLASS/LASS/customfeatures
 - Calls to information providers reached via Qwest facilities and contracted by Qwest
 - Calls to Directory Assistance where Qwest provides such service to a CLEC customer
 - Calls completed via Qwest-provided Operator Services where Qwest provides such service to CLEC local service Customer
 - For Qwest-provided Centrex Service, station level detail records shall include complete call detail and complete timing information
- 5.1.1.5 Retention of Records: Qwest shall maintain a machine readable back-up copy of the message detail provided to CLEC for a minimum of forty-five (45) calendar days. Qwest shall provide any data back-up to CLEC upon the request of CLEC.
- 5.1.1.6 Qwest shall provide to CLEC Recorded Usage Data for CLEC Customers only. Qwest shall not submit other carrier local usage data as part of the CLEC recorded usage data.

- 5.1.1.7 Qwest shall not bill to CLEC Customers any recurring or non-recurring charges for service provided by Qwest to CLEC except where explicitly permitted to do so within a written agreement between Qwest and CLEC.
- 5.1.1.8 The Parties shall record and rate all calls to information service providers (e.g., 976 service calls) and shall bill such calls directly the calling party's local service provider. In the event a Party's end-user disputes such a call, that Party may recourse consistent with the recourse arrangement the billing Party has with its information service provider.
- 5.1.1.9 Qwest shall provide Recorded Usage Data to CLEC billing locations as designated by CLEC.
- 5.1.1.10 Qwest shall establish an Interconnect Service Center (ISC) or similar function to serve as CLEC's single point of contact to respond to CLEC call usage, data error, and record transmission inquiries.
 - 5.1.1.10.1 Qwest shall provide CLEC with a single point of contact and remote identifiers for each sending location.
- 5.1.1.11 CLEC shall provide a single point of contact responsible for receiving usage transmitted by Qwest and receiving usage tapes from a courier service in the event of a facility outage.
- 5.1.1.12 Qwest shall bill and CLEC shall pay the charges for Recorded Usage Data. Billing and payment shall be in accordance with the applicable terms and conditions set forth in the Connectivity Billing and Recording Section of this Attachment 5.
- 5.1.1.13 Without waiver of, and in addition to the Audit and Examination rights set forth in Part A of this Agreement, upon reasonable notice and at reasonable times, a Party or its authorized representatives may examine the recording Party's AMA records which relate to perceived problems with the recordings of the usage data relating to the billed Party under this Attachment.

5.1.2 Charges

- 5.1.2.1 The Parties may charge fees for recording, rating or transmitting usage data. For the six (6) months following the initial recording, rating or transmitting of non-test usage data, the Parties shall not charge each other.
- 5.1.2.2 No charges shall be assessed for incomplete call attempts.

5.1.3 Central Clearinghouse & Settlement

- 5.1.3.1 Qwest shall support and participate with CLEC to develop an in and out-collect process developed for intra-region alternately billed messages.
- 5.1.3.2 Qwest shall settle with CLEC for both intra-region and inter-region billing exchanges of calling card, bill-to-third party, and collect calls, including settlement through the CMDS CATS system for inter-region billing.

5.1.4 Lost Data

- 5.1.4.1 Loss of Recorded Usage Data - CLEC recorded usage data determined to have been lost, damaged or destroyed as a result of an error or omission by Qwest in its performance of the recording function shall, upon CLEC request, be recovered by Qwest at no charge to CLEC. In the event the data cannot be recovered by Qwest, Qwest shall estimate the messages and associated revenue, with assistance from CLEC, based upon the method described below. This method shall be applied on a consistent basis, subject to modifications agreed to by Qwest and CLEC. This estimate shall be used to adjust amounts CLEC owes Qwest for services Qwest provides in conjunction with the provision of recorded usage data.
- 5.1.4.2 Partial Loss - Qwest shall review its daily controls to determine if data has been lost. When there has been a partial loss, actual message and minute volumes shall be reported, if possible. Where actual data are not available, a full day shall be estimated for the recording entity, as outlined in the following paragraphs. The amount of the partial loss is then determined by subtracting the data actually recorded for such day from the estimated total for such day.
- 5.1.4.3 Complete Loss - Estimated message and minute volumes for each loss consisting of an entire AMA tape or entire data volume due to its loss prior to or during processing, loss after receipt, degaussed before processing, receipt of a blank or unreadable tape, or lost for other causes, shall be reported.
- 5.1.4.4 Estimated Volumes - From message and minute volume reports for the entity experiencing the loss, Qwest shall secure message/minute counts for the four (4) corresponding days of the weeks preceding that in which the loss occurred and compute an average of these volumes. Qwest shall apply the appropriate average revenue per message ("ARPM") mutually agreed upon to the estimated message volume to arrive at the estimated lost revenue.
- 5.1.4.5 If the day of loss is not a holiday but one (1) (or more) of the preceding corresponding days is a holiday, Qwest shall use additional preceding weeks in order to procure volumes for two (2) non-holidays in the previous two (2) weeks that correspond to the day of the week that is the day of the loss.

- 5.1.4.6 If the loss occurs on a weekday that is a holiday (except Christmas and Mother's Day), Qwest shall use volumes from the two (2) preceding Sundays.
- 5.1.4.7 If the loss occurs on Mother's Day or Christmas, Qwest shall use volumes from that day in the preceding year multiplied by a growth rate mutually agreed upon by the Parties.
- 5.1.4.8 CLEC may also request data be provided that has previously been successfully provided by Qwest to CLEC. Qwest shall re-provide such data, if available, at a charge mutually agreed to by the Parties.

5.1.5 Testing, Changes and Controls

- 5.1.5.1 The Recorded Usage Data, EMR format, content, and transmission process shall be tested as mutually agreed to by the Parties.
- 5.1.5.2 Interface Testing: The purpose of this test is to ensure that the usage records can be sent by Qwest to CLEC and can be accepted and processed by CLEC. Qwest shall provide a test file to CLEC designated Regional Processing Center (RPC) in the format that shall be used for live day-to-day processing. The file's test content and volume shall be mutually agreed to by the Parties. CLEC shall review the file and verify that it conforms to its data center requirements. CLEC shall notify Qwest in writing whether the format is acceptable. CLEC shall also provide Qwest with the agreed-upon control reports as part of this test.
- 5.1.5.3 Operational Test: The purpose of this test is to ensure that volumes of usage in consecutive sequence can be extracted, distributed, and processed by Qwest and CLEC.
- 5.1.5.4 For testing purposes, Qwest shall provide CLEC with Qwest recorded usage for a minimum of five (5) consecutive days. CLEC shall provide Qwest with the message validation reports associated with test usage.
- 5.1.5.5 Test File: Test data should be transported via CONNECT DIRECT whenever possible. In the event that courier service must be used to transport test media, the physical tape characteristics to be used are described in this Attachment.
- 5.1.5.6 Periodic Review: Control procedures for all usage transferred between Qwest and CLEC shall require periodic review. This review may be included as part of an annual audit of Qwest by CLEC or as part of the normal production interface management function. Breakdowns which impact the flow of usage between Qwest and CLEC must be identified and jointly resolved as they occur. The resolution may include changes to control procedures, as similar problems would be avoided in the future.

Any changes to control procedures shall be mutually agreed upon by CLEC and Qwest.

5.1.5.7 Qwest Software Changes

5.1.5.7.1 When Qwest plans to introduce any software changes which impact the format or content structure of the usage data feed to CLEC, designated Qwest personnel shall notify CLEC no less than one hundred twenty (120) calendar days before such changes are implemented.

5.1.5.7.2 Qwest shall communicate the projected changes to the appropriate groups in CLEC so that potential impacts on CLEC processing can be determined.

5.1.5.7.3 CLEC personnel shall review the impact of the change on the entire control structure and the post conversion test plan, herein. CLEC shall negotiate any perceived problems with Qwest and shall arrange to have the data tested utilizing the modified software.

5.1.5.7.4 If it is necessary for Qwest to request changes in the schedule, content or format of usage data transmitted to CLEC, Qwest shall notify CLEC.

5.1.5.8 CLEC Requested Changes

5.1.5.8.1 CLEC may request changes in the schedule, content, format of the usage data transmitted from Qwest, as deemed necessary by CLEC.

5.1.5.8.2 When the negotiated changes are to be implemented, CLEC and/or Qwest shall arrange for testing of the modified data in a Post Conversion Test Plan designed to encompass all types of changes to the usage data transferred by Qwest to CLEC and the methods of transmission for that data.

5.1.5.9 Qwest System Change Description

5.1.5.9.1 For a Qwest system change, Qwest shall provide CLEC with an overall description of the change, stating the objective and a brief explanation of the reasons for the change.

5.1.5.9.2 During the initial negotiations regarding the change, Qwest shall provide a list of the specific records and/or systems impacted by the change to designated CLEC personnel.

5.1.5.9.3 Qwest shall also provide CLEC a detailed description of the changes to be implemented. It shall include sufficient detail for designated CLEC personnel to analyze and estimate the effects of the changes and to design tests to verify the accuracy of the implementation.

5.1.5.10 Change Negotiations

5.1.5.10.1 CLEC shall be notified in writing of all proposed change negotiations initiated by Qwest in writing. In turn, CLEC shall notify Qwest in writing of proposed change negotiations initiated by CLEC.

5.1.5.10.2 After formal notification of planned changes, whether originated by Qwest or CLEC, designated CLEC personnel shall schedule negotiation meetings as required with designated Qwest personnel. The first meeting should produce the overall change description (if not previously furnished) and the list of records and/or systems affected.

5.1.5.10.3 In subsequent meetings, Qwest shall provide the detailed description of changes to be implemented. After reviewing the described changes, designated CLEC personnel shall negotiate a detailed test procedure with Qwest.

5.1.5.11 Changes to controls: CLEC may request changes to the control structure. The Parties shall mutually agree on the requested changes.

5.1.5.12 Verification Of Changes

5.1.5.12.1 Based on the detailed description of changes furnished by Qwest, CLEC and Qwest personnel shall:

- Determine the type of change(s) to be implemented;
- Develop a comprehensive test plan;
- Negotiate scheduling and transfer of modified data with Qwest;
- Negotiate testing of modified data with the appropriate CLEC RPC;
- Negotiate processing of verified data through the CLEC billing system with the RPC;
- Arrange for review and verification of testing with appropriate CLEC groups;
- and
- Arrange for review of modified controls, if applicable.

5.1.5.13 Introduction of Changes:

5.1.5.13.1 When all the testing requirements have been met and the results reviewed and accepted, designated CLEC and Qwest personnel shall:

- Negotiate an implementation schedule;
- Verify the existence of a contingency plan with the appropriate CLEC personnel;
- Arrange for the follow-up review of changes with appropriate CLEC personnel;
- Arrange for appropriate changes in control program, if applicable; and
- Arrange for long-term functional review of impact of changes on the CLEC billing system, i.e., accuracy, timeliness, and completeness.

5.2 Information Exchange and Interfaces

5.2.1 Core Billing Information

- 5.2.1.1 Recorded Usage Data includes all intraLATA toll and local usage. Qwest shall provide CLEC with unrated EMR records associated with all intraLATA toll and local usage which it records on CLEC behalf. Any category, group and/or record types approved in the future for Qwest shall be included if they fall within the definition of Local Resale. CLEC shall be given notification thirty (30) days prior to implementation of a new type, category and/or record.
- 5.2.1.2 Qwest shall provide rated EMR records only when explicit consent for sending such records has been obtained from CLEC.
- 5.2.1.3 All messages recorded by a Party and billed to the other Party are to be transmitted to the billed Party. Recorded usage includes all usage billable to the other Party.
- 5.2.1.4 Data Delivery Schedules: Data shall be delivered to CLEC by Qwest daily (Monday through Friday, except holidays) unless otherwise negotiated. CLEC and/or Qwest Data Center holidays are excluded. Qwest and CLEC shall exchange schedules of designated Data Center holidays.

5.2.2 Local Account Maintenance

- 5.2.2.1 When CLEC purchases local service from Qwest, and, as appropriate, when CLEC purchases certain unbundled Network Elements, Qwest shall provide CLEC with local account maintenance as described herein.
- 5.2.2.2 When notified by a CLEC that a CLEC customer has switched to CLEC's service, Qwest shall provision the change and notify CLEC via Connect:Direct within twenty-four (24) hours of the provisioning that the customer has changed to another service provider ("OutPLOC").
- 5.2.2.3 When notified by CLEC that a customer has changed its PIC only from one interexchange carrier to another, Qwest shall provision the PIC only change.
- 5.2.2.4 If notified by an IXC using a '01' PIC order record that a CLEC Customer has changed its PIC only, Qwest shall reject the order and notify that IXC using an industry standard '3148' record with the operating company number of CLEC indicated, that a '01' care PIC record should be sent to CLEC for processing.

5.2.3 Product/Service Specific

- 5.2.3.1 Subject to conditions specified in Section 5.1.1(c) of this Attachment 5, Qwest shall provide a Specialized Service/Service Provider Charge record to support the Special Features Star Services if these features are part of Qwest's offering. Such record shall be an EMR 10-01-18 record or industry standard record as may subsequently be mutually agreed to by the Parties. Such record shall be a 10-01-18 record or Bellcore assigned record as may be subsequently agreed to by the Parties.

5.2.4 Emergency Information

- 5.2.4.1 Qwest shall provide the transport facility for transmitting usage and billing data between the Qwest location and the CLEC location. Qwest shall transmit via CONNECT DIRECT whenever possible. In the event usage transfer cannot be accommodated by CONNECT DIRECT because of extended (one (1) Business Day or longer) facility outages, Qwest shall contract for a courier service to transport the data via tape.

- 5.2.4.2 The Parties shall mutually agree to the following standards when emergency data is transported to CLEC on tape or cartridge via a courier. The data shall be in fixed or variable block format as mutually agreed to by the Parties:

Tape: 9-track, 6250 (or 1600) BPI (Bytes per inch)
 Cartridge: 38,000 BPI (Bytes per inch)
 LRECL: 2,472 Bytes
 Parity: Odd
 Character Set: Extended Binary Coded Decimal Interchange Code (EBCDIC)
 External labels: Exchange Carrier Name, Dataset Name (DSN) and volume serial number
 Internal labels: IBM Industry OS labels shall be used. They consist of a single volume label and two (2) sets of header and trailer labels.

- 5.2.4.1 To the extent the above standards are changed or revised, the Parties may agree to negotiate the incorporation of such new standards.

5.2.5 Rejected Recorded Usage Data

- 5.2.5.1 At the discretion of CLEC, any messages that cannot be rated and/or billed by CLEC may be returned to Qwest via CONNECT DIRECT. Returned messages shall be sent directly to Qwest in EMR format. Standard EMR return codes shall be utilized.

5.2.6 Interfaces

- 5.2.6.1 The Parties shall transmit formatted Recorded Usage Data via Connect Direct.

- 5.2.6.2 CLEC shall notify Qwest of resend requirements if a pack or entire dataset must be replaced due to pack rejection, damage in transit, dataset name failure, etc.
- 5.2.6.3 Critical edit failure on the pack header or pack trailer records shall result in pack rejection (e.g., detail record count not equal to grand total included in the pack trailer). Notification of pack rejection shall be made by CLEC within one (1) Business Day of processing. Rejected packs shall be corrected by Qwest and retransmitted to CLEC within twenty-four (24) hours or within an alternate time frame negotiated on a case by case basis.
- 5.2.6.4 A pack shall contain a minimum of one (1) message record or a maximum of 9,999 message records plus a pack header record and a pack trailer record. A file transmission contains a maximum of ninety-nine (99) packs. A dataset shall contain a minimum of one (1) pack. Qwest shall provide CLEC one (1) dataset per sending location, with the agreed upon RAO/OCN populated in the header and trailer records.

5.2.7 Formats & Characteristics

- 5.2.7.1 Rated in collect messages should be transmitted via the CONNECT DIRECT and can be intermingled with the unrated messages. No special packing is needed.
- 5.2.7.2 EMR: Qwest shall provide Recorded Usage Data in the EMR format and by category, group and record type, and shall be transmitted, via a direct feed, to CLEC. The types of EMR records that CLEC can expect to receive from Qwest, includes, but is not limited to, the following:

Header Record	20-21-01, 20-20-01 or 20-24-01
Trailer Record	20-21-02, 20-20-02 or 20-24-02
Detail Records *	01-01-01, 06, 08, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82, 10-01-01, 06, 08, 14, 17, 18, 31, 32, 35, 37
Credit Records	03-01-01, 06, 08, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
Rated Credits	41-01-01, 06, 08, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
Cancel Records	51-01-01, 06, 08, 09, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,
Correction Records	71-01-01, 06, 08, 14, 17, 18, 31, 32, 35, 37, 80, 81, 82,

* Category 01 is utilized for rated messages; Category 10 is utilized for unrated messages. Category 10 records are to have indicator 13 populated with a value of 5

5.2.7.2.1 To the extent the above standards are changed or revised, the Parties may agree to incorporate such new standards.

- 5.2.7.3 Qwest shall comply with the most current version of Bellcore standard practice guidelines for formatting EMR records.

- 5.2.7.4 The Interfacing Bell RAO, OCN, and remote identifiers shall be used by CLEC to control invoice sequencing and each shall have its own invoice controls. The OCN shall also be used to determine where the message returns file, containing any misdirected and unguidable usage, shall be sent.
- 5.2.7.5 The file's Record Format (RECFM) shall be Variable Block or fixed as negotiated, Size and the Logical Record Length (LRECL) shall be as mutually agreed to by the Parties.
- 5.2.7.6 Intentionally left blank for numbering consistency..
- 5.2.7.7 Qwest shall transmit the usage to CLEC using dataset naming conventions mutually agreed upon by the Parties.

5.2.8 Controls

- 5.2.8.1 CLEC shall test and certify the CONNECT DIRECT interface to ensure the accurate receipt of Recorded Usage Data.
- 5.2.8.2 Header and trailer records shall be populated in positions 13-27 with the following information:

Position	
13-14	Invoice numbers (1-99)
15-16	Bell Co. ID number
17-19	Interfacing Bell RAO Code
20-23	CLEC OCN - value 7229
24-27	Reseller OCN

The trailer grand total record count shall be populated with total records in pack (excluding header & trailer)

- 5.2.8.3 Control Reports: CLEC accepts input data provided by Qwest in EMR format in accordance with the requirements and specifications detailed in this Attachment 5. In order to ensure the overall integrity of the usage being transmitted from Qwest to CLEC, data transfer control reports shall be required. These reports shall be provided by CLEC to Qwest on a daily or otherwise negotiated basis and shall reflect the results of the processing for each pack transmitted by Qwest.
- 5.2.8.4 Control Reports - Distribution: Since Qwest is not receiving control reports, dataset names shall be established during detailed negotiations.
- 5.2.8.5 Message Validation Reports: CLEC shall provide Message Validation reports to the designated Qwest System Control Coordinator once a day (or as otherwise agreed to by the Parties). These reports shall be provided for all data received within Qwest Local Resale feed and shall be transmitted Monday through Friday.

- 5.2.8.6 Incollect Pack Processing: This report provides vital statistics and control totals for packs rejected and accepted and dropped messages. The information is provided in the following report formats and control levels:

Qwest name; and
Reseller total messages processed in a pack;
Packs processed shall reflect the number of messages initially erred and accepted within a pack; and
Reseller total packs processed.

5.3 Standards

- 5.3.1 When requested for security purposes and on an exception basis when a reasonable need is demonstrated, a Party shall provide the other Party with Recorded Usage Data within two (2) hours of the call completion or within the same period that the recording Party would have that data for itself under similar circumstances. If not available in EMR format, the Recorded Usage Data may be provided in AMA format.
- 5.3.2 Qwest shall include the Working Telephone Number (WTN) of the call originator on each EMR call record.
- 5.3.3 End user Customer usage records and station level detail records shall be in packs in accordance with EMR standards or applicable industry standards as defined in Section 5.3.1 of this Attachment.
- 5.3.4 Qwest shall provide Recorded Usage Data once a day to CLEC on a schedule to be determined by the Parties, Monday through Friday, excluding holidays. The Parties shall work together to reach agreement on an acceptable holiday schedule. Qwest shall provide to CLEC the Recorded Usage Data not more than one (1) Business Day after termination of the call for which usage data is to be provided.
- 5.3.5 Qwest shall segregate and organize the Recorded Usage Data in accordance with Section 5.2.7 of this Attachment.

5.4 Standards for Transmitting and Recording Usage Data

- 5.4.1 Within thirty (30) days of the Effective Date of this Agreement, the Parties shall jointly develop standards for transmitting and recording usage data.
- 5.4.2 Timeliness:
- 5.4.3 Completeness
- 5.4.4 Accuracy:
- 5.4.5 [Intentionally left blank for numbering consistency]

5.4.6 Recorded Usage Data Accuracy

5.4.7 Usage Inquiry Responsiveness

5.5 Reporting

5.5.1 Within thirty (30) days of the Effective Date of this Agreement, the Parties shall jointly develop reporting procedures for the standards for transmitting and recording usage data described in Section 5.4 above.

6. Maintenance

6.1⁸ Interim Maintenance and Repair Processes

Repair capabilities allow CLEC to report trouble with communications circuits and services provided by Qwest. The functions, processes, and systems used in repair are based on a Trouble Report (TR), which is an electronic document maintained in one or more Operations Systems. A TR contains information about the customer, the trouble, the status of the work on the trouble and the results of the investigation and resolution efforts. These business capabilities will be made available to CLEC in the following functional set: open a trouble report, cancel a trouble report, send notification of status change, and close a trouble report.

6.1.1 Open Trouble Report

Gives CLEC the capability to enter a trouble report ("TR") which initiates Qwest repair activities.

6.1.2 Cancel Trouble Report

Gives CLEC the capability to cancel a TR that it had previously opened.

6.1.3 Trouble Report Closure

Notifies CLEC as soon as a TR it opened) has been closed, indicating Qwest has completed repair activities and considers the trouble resolved.

6.1.4 Get Current Trouble Report Status

Allows CLEC to request the current status of a TR that the customer previously opened with Qwest. It is only allowed on trouble reports which were entered by the customer requesting the status.

⁸ Per MCI Order, pp. 15-16 at Issue 26 and MCI/ AT&T Order at Issue 41.

6.1.5 Modify Trouble Report

Allows CLEC to change certain data in a TR that the customer previously opened with Qwest, possibly affecting Qwest repair activities (with some negotiable exceptions). It is only allowed on TRs which were entered by the customer making the modification, and does not necessarily protect the customer from charges associated with previous information in the TR.

6.1.6 Escalate Trouble Report

Allows CLEC to bring a TR that the customer previously opened with Qwest to the attention of a higher level of supervision within Qwest, with the expectation that the TR will get more attention. It is only allowed on TRs which were entered by the customer requesting the escalation, and typically needs to be responded to by the person at the level escalated to within a negotiated time frame.

6.1.7 Verify Features

Allows CLEC to verify line features on an existing line.

6.1.8 Text Messaging

Allows textual communication between Qwest and CLEC personnel for the purpose of resolving the trouble. The messages are logged in the TR, thus the function can only be performed for TRs which were entered by the customer involved in the messaging. Specific uses of this messaging include allowing the customer to add descriptive information about the trouble, allowing Qwest to request additional trouble information, and allowing Qwest to implement the status window functionality through manual procedures.

6.1.9 Trouble History

Provides CLEC with trouble history information currently retained on the circuit.

6.1.10 Testing

Notifies CLEC of the results of initial or subsequent circuit tests for a TR previously opened by that customer.

6.2 General Requirements

6.2.1 Qwest shall provide repair, maintenance, testing, and surveillance for all Telecommunications Services and unbundled Network Elements and Combinations in accordance with the terms and conditions of this Agreement.

6.2.1.1 Qwest shall provide CLEC with the same level of maintenance support as Qwest provides itself in accordance with standards and performance

measurements that Qwest uses and/or which are required by law, regulatory agency, or by Qwest's own internal procedures, whichever are the most rigorous. These standards shall apply to the quality of the technology, equipment, facilities, processes, and techniques (including, but not limited to, such new architecture, equipment, facilities, and interfaces as Qwest may deploy) that Qwest provides to CLEC under this Agreement.

- 6.2.1.2 Qwest shall provide a SPOC (Single Point of Contact) for Residence, and a SPOC for Business for CLEC to report via a toll free telephone number maintenance issues and trouble reports twenty four (24) hours a day and seven (7) days a week. The SPOC Residence toll free number, and SPOC Business toll free number, will be the numbers for all of Qwest's fourteen (14) states.
- 6.2.1.3 Qwest shall provide CLEC maintenance dispatch personnel on the same schedule that it provides its own Customers.
- 6.2.2 CLEC shall handle all interaction with CLEC Customers including all calls regarding service problems, scheduling of technician visits, and notifying the Customer of trouble status and resolution. When a Qwest technician is on site, the customer will be statused in accordance with standard Qwest procedures.
- 6.2.3 CLEC and Qwest will provide their respective customers with the correct telephone numbers to call for access to their respective repair bureaus.
- 6.2.4 Customers of CLEC shall be instructed to report all cases of trouble to CLEC. Customers of Qwest shall be instructed to report all cases of trouble to Qwest. CLEC and Qwest will provide their respective repair contact numbers to one another on a reciprocal basis.
- 6.2.5 Qwest shall cooperate with CLEC to meet maintenance standards for all Telecommunications Services, unbundled Network Elements and Combinations ordered under this Agreement. Such maintenance standards shall include, without limitation, standards for testing, network management, call gapping, and notification of upgrades as they become available.
- 6.2.6 All Qwest employees or contractors who perform repair service for CLEC Customers shall follow mutually agreed to procedures in all their communications with CLEC Customers. At a minimum, these procedures, and protocols shall ensure that: (a) Qwest employees or contractors shall perform repair service that is at least equal in quality to that provided to Qwest Customers; and (b) trouble calls from CLEC Customers shall receive response time priority that is at least equal to that of Qwest Customers, regardless of whether the Customer is a CLEC Customer or a Qwest Customer.
- 6.2.7 In responding to repair calls, neither Party shall make disparaging remarks about each other, nor shall they use repair calls as the basis for internal referrals or to solicit customers to market services. Either Party may respond with accurate information in answering customer questions.

- 6.2.8 Qwest shall perform scheduled maintenance, including, without limitation, required and recommended maintenance intervals and procedures, for all Telecommunications Services, Network Elements and Combinations provided to CLEC under this Agreement equal in quality to that currently provided by Qwest in the maintenance of its own network.
- 6.2.8.1 Qwest shall exercise its best efforts to provide the designated CLEC SPOC at least sixty (60) days' advance notice of any scheduled activity which will likely impact CLEC customers.
- 6.2.8.2 Plans for significant service affecting activities shall include, at a minimum, the following information: location and type of facilities, specific work to be performed, date and time work is scheduled to commence, work schedule to be followed, date and time work is scheduled to be completed, and estimated number of work hours for completion. Examples of such activities include, but are not limited to, office conversions, cable facility rolls, and tandem re-homes.
- 6.2.9 Qwest shall exercise its best efforts to notify CLEC of all non-scheduled activities to be performed by Qwest on any Network Element, including, without limitation, any hardware, equipment, software, or system, providing service functionality which will likely impact CLEC Customers.
- 6.2.9.1 Qwest shall provide to the designated SPOC maximum advance notice of such non-scheduled activities in the same time and manner that it provides to its operation service centers.
- 6.2.9.2 Qwest shall perform emergency maintenance as promptly as possible to maintain or restore service and shall promptly advise the CLEC designated SPOC of any such actions it takes.
- 6.2.10 Qwest shall provide CLEC a detailed description of any and all emergency restoration plans and disaster recovery plans which are in place during the term of this Agreement. Such plans shall include, at a minimum, the following: (a) provisions for immediate notification to CLEC of the existence, location, and source of any emergency network outage potentially affecting a CLEC Customer; (b) establishment of a SPOC responsible for initiating and coordinating the restoration of all local services and Network Elements or Combinations; (c) methods and procedures to provide CLEC with real-time access to information relating to the status of restoration efforts and problem resolution during the restoration process; (d) an inventory and description of mobile restoration equipment, by location; (e) methods and procedures for reprovisioning of all Telecommunications Services and Network Elements or Combinations after initial restoration, (f) equal priority, as between CLEC Customers and Qwest Customers, for restoration efforts, consistent with FCC Service Restoration guidelines, including, without limitation, deployment of repair personnel, and access to spare parts and components, and (g) a mutually agreeable process for escalation of maintenance problems, including a complete,

up-to-date list of responsible contacts, each available twenty-four (24) hours per day, seven (7) days per week.

- 6.2.10.1 For purposes of this Section 6, an emergency network outage is defined as 5,000 or more blocked call attempts in a ten (10) minute period for all Customers in a single exchange.
- 6.2.10.2 CLEC and Qwest will work cooperatively to assess up chain (end office to tandem calls), down chain (tandem to end office calls), and overall customer impact. Qwest categorizes, reports and reacts to network outages using FCC reporting criteria and Qwest Abnormal Condition Report Criteria.
- 6.2.11 Qwest and CLEC shall establish mutually acceptable methods and procedures for the immediate handling of misdirected calls from CLEC customers to Qwest requesting repair. The Customer shall be informed that CLEC is its local service provider (LSP), and the Qwest representative will provide the CLEC customer with the appropriate telephone number of the CLEC repair center. If the LSP screen indicator is not available, the Qwest representative will ask the CLEC Customer if it knows the name of its LSP. The Qwest representative will provide the CLEC Customer with the appropriate number of the CLEC repair center. These calls are limited to repair information only, and are not to be used for marketing purposes.
- 6.2.12 When electronic interface is available, Qwest shall inform CLEC of repair completion and trouble reason within ten (10) minutes upon completion. If no electronic interface is available, CLEC will provide a SPOC for Qwest to call as soon as possible after repair completion. Qwest shall notify CLEC that the trouble has been cleared. This is done on a real-time basis. Therefore the technician will notify CLEC in a similar manner, for both dispatched-in and dispatched-out troubles. The report shall not be considered closed until such notification is made. CLEC will contact its Customer to determine if repairs were completed and confirm the trouble no longer exists.
- 6.2.13 Qwest and CLEC shall mutually develop escalation procedures to be followed if, in CLEC judgment, any performance standard defined in this Agreement is not met for any individual trouble report. The escalation procedures to be provided shall include names and telephone numbers of Qwest management personnel who are responsible for maintenance issues and who will be contacted when a trouble condition is escalated.
- 6.2.14 In the event Qwest shall fail to conform to any specified performance and service quality standards, identified elsewhere in this Agreement, Qwest shall perform and deliver to CLEC, a standard root cause analysis of the reasons for Qwest's failure to conform, and Qwest shall correct said cause as soon as possible, at its own expense.
- 6.2.15 Dispatching of Qwest technicians to CLEC Customer premises shall be accomplished by Qwest pursuant to a request received from CLEC. CLEC shall be

able to schedule maintenance appointments in intervals at parity with Qwest upon opening of trouble report.

6.2.16 [Intentionally left blank for numbering consistency]

6.2.17 Qwest shall supply CLEC with a unique number to identify each CLEC initial trouble report opened.

6.2.17.1 Qwest and CLEC agree to a trouble priority and severity coding format for all trouble reports handled between the two companies. Troubles are prioritized according to appointment schedules:

6.2.17.1.1 Priority 1 = Out of Service

6.2.17.1.2 Priority 2 = Affecting Service

6.2.17.1.3 Priority 3 = Feature Trouble

6.2.17.2 Customer has the ability to escalate.

6.2.18 Qwest shall provide for resale any maintenance/protection plans for services offered under this Agreement to CLEC that it offers Qwest's own Customers.

6.2.19 Qwest's current trouble reporting system does not provide the capability to reopen a closed trouble report. Therefore, Qwest shall allow CLEC to designate that a trouble report is associated with the initial trouble report which was closed in the past twenty-four (24) hours without repairs being performed to the Customer's satisfaction. Qwest shall measure the frequency of these types of repeated reports and will demonstrate non-discriminatory treatment to CLEC.

6.2.20 Additional Unbundling Requirements

6.2.20.1 When trouble is reported by a Customer served through unbundled Network Elements, CLEC will test its network to identify any problems. If no problems are identified with the CLEC network, CLEC will open a trouble report with Qwest and provide switch-based test results to the Qwest technician. Qwest shall then test its portion of the network and perform repairs as required in the time frames set forth below in this Attachment.

6.2.20.1.1 If Qwest tests the unbundled loop and there is no trouble found ("NTF"), the same shall be reported back to CLEC. If, upon testing the unbundled loop, the trouble is isolated to the Customer side of the NID (inside wire, CPE, etc.), CLEC shall be billed a trouble isolation charge ("TIC"). If, after CLEC has opened a trouble ticket, it cancels the trouble ticket before a Qwest technician has been dispatched on the trouble, no charges will apply. If the Qwest technician has been dispatched on the reported trouble before the trouble ticket is canceled by CLEC, a TIC will be applied.

6.2.20.1.2 CLEC will coordinate combined testing or repair activities until trouble is resolved. Qwest shall provide repair updates to CLEC. For trouble isolation both Parties will cooperatively test to isolate the trouble as required.

6.3 Systems Interfaces and Information Exchanges

- 6.3.1 Qwest shall cooperate with CLEC to establish a real-time, electronic interface to Qwest's maintenance systems and databases. This system shall be based on existing and future uniform industry standards being worked in T1M1 standards committee and Electronics Communications Implementation Committee ("ECIC") industry forum.
 - 6.3.1.1 An electronic bond will be a system to system connection with immediate update capability. In no way shall this interface cause CLEC personnel to use Qwest systems via remote hook up or any other means of access.
 - 6.3.1.2 This interface shall allow CLEC personnel to perform the following functions for CLEC Customers: (a) enter trouble reports in the Qwest maintenance systems for a CLEC Customer; (b) retrieve and track current status on all CLEC Customer trouble report; (c) receive "estimated time to repair" (ETTR) on a real-time basis; (d) receive immediate notification in the event a repair person is unable to be present for, or anticipates missing, a scheduled repair appointment; (e) retrieve all time and material charges that apply to CLEC at the time of ticket closure (itemized by time spent, price of materials used, procedures employed, amounts incurred in each such category, and total by Customer, per event; and (f) receive automated notification of case closure.
 - 6.3.1.3 Automated interfaces must be provided into a centralized operations support systems database for real time network monitoring to proactively identify potential service degradation. Such systems must monitor and report on the integrity of the Qwest network, isolate trouble and, where applicable (e.g., when an unbundled loop is connected to an unbundled port or when an unbundled loop includes such equipment as DCS, D4, etc.) initiate repair operations, test individual unbundled loops and generate maintenance and repair notices that impact any end user's ability to complete calls. Ongoing maintenance practices on such unbundled loops must be equal to or exceed the practices employed by Qwest for facilities used to provide Services for Resale.
 - 6.3.1.4 Qwest agrees to develop and implement, as soon as possible, with a target date of November 1, 1997, the electronic interfaces described above.
- 6.3.2 Qwest agrees that CLEC may report troubles directly to a single Qwest Repair/Maintenance Center for both residential and business Customers. The Repair Center will have two separate numbers, one for residence and one for business. CLEC's Customers will be treated in the same manner as Qwest Customers.

- 6.3.3 Qwest shall perform all testing for Resale Services. Qwest shall provide the capability for CLEC to receive MLT test results while CLEC customer is on line during the initial trouble report, when technically feasible in the Qwest network.
 - 6.3.3.1 Qwest shall provide test results to CLEC, if appropriate, for trouble clearance. In all instances, Qwest will provide CLEC with the disposition of the trouble.
- 6.3.4 Qwest shall provide to CLEC the ability to obtain the status on open maintenance trouble reports via telephone or by another interface as agreed to by the Parties. Qwest agrees to provide the status of residence and small business trouble reports upon CLEC request.
- 6.3.5 Qwest agrees to provide to CLEC the status for open maintenance trouble reports for large business Customers anytime the status of the trouble report changes or upon CLEC request.
- 6.3.6 Qwest agrees that CLEC may call Qwest to verify central office features and functions as they relate to an open trouble report. Qwest agrees to work with CLEC on the initial trouble report to isolate the cause of the trouble and, where possible, resolve the feature/function related trouble at that time.
- 6.3.7 Qwest agrees to proactively advise CLEC of any central office failure that is known at the time of any inquiry or trouble report. Qwest agrees to continue to work with CLEC toward implementing a process to meet CLEC requirements for notification of switch failures as soon as possible.
- 6.3.8 Qwest agrees to provide an Estimated Time To Repair (ETTR) on all residence and small business trouble reports.
- 6.3.9 Qwest agrees to develop, with CLEC's cooperation, mutually acceptable workcenter interface agreements to document methods and procedures for interim and final interfaces for each service within (30) thirty days after CLEC notice to Qwest of its initiation of that service.
 - 6.3.9.1 After the initial deployment of the workcenter processes, Qwest agrees to continue working with CLEC to further develop, improve and refine the operational process described in this Agreement.
- 6.3.10 Qwest agrees to provide CLEC with repair history of previous trouble reports on customer service of open trouble report.
- 6.3.11 Qwest shall provide CLEC with the capability to cancel a trouble report.
- 6.3.12 Qwest shall provide CLEC with the capability to modify a trouble report.

6.4 Standards

- 6.4.1 Maintenance charges for premises visits by Qwest employees or contractors shall be billed by CLEC to its Customer.
 - 6.4.1.1 Qwest employees or contractors shall present the Customer with a CLEC provided, CLEC-branded form detailing the time spent, the materials used and an indication that the trouble has either been resolved, or that additional work will be necessary in accordance with the provisions of this Agreement.
 - 6.4.1.2 If additional work is required, Qwest employees or contractors shall call CLEC from the Customer premises so that CLEC can schedule a new appointment with Qwest and Customer at the same time.
- 6.4.2 Qwest agrees to work with CLEC to support expeditious development of an industry standard trouble report entry format and agrees to implement such standard within sixty (60) days after final resolution by the Network Operation Forum (NOF).

6.5 Performance Measurements and Reporting

6.5.1 Cycle Time Measurements

[Intentionally left blank for numbering consistency]

7. Miscellaneous Services and Functions

7.1 [Intentionally left blank for numbering consistency]

7.2 [Intentionally left blank for numbering consistency]

7.3 Performance Measurements and Reporting

- 7.3.1 [Intentionally blank for numbering consistency]⁹
- 7.3.2 [Intentionally blank for numbering consistency]¹⁰
- 7.3.3 CLEC may, at its discretion, further request additional and/or modified reporting as business needs demand.

⁹ Procedural Order, July 14, 1997, pages 19-20.

¹⁰ Procedural Order, July 14, 1997, pages 19-20.

INTERFACE REQUIREMENTS FOR PRE-ORDERING, ORDERING, PROVISIONING, MAINTENANCE AND REPAIR, AND BILLING

PURPOSE

1. Purpose

- 1.1 This Attachment 6 sets forth the interface requirements for pre-ordering, ordering and provisioning, maintenance and repair, and billing, where CLEC provides service to its customers through resale of Qwest Local Services or through the use of Unbundled Network Elements and Combinations.

2. Use of Standards

- 2.1 As described below, CLEC and Qwest agree to implement each interface described below based upon existing and evolving industry standards or as mutually agreed upon. The Parties shall transition the electronic interfaces to industry standards within a time frame mutually agreed to.

3. Reimbursement

- 3.1 Reimbursement for operational interfaces shall be as determined by the appropriate regulatory agency as set forth in this Agreement.

4. Scope

- 4.1 This Attachment addresses the real-time transaction-based protocols and transport networks that will be used to exchange information for:

- Preorder/Ordering/Provisioning for Service Resale (SR) and Customer-Specific Unbundled Network Elements (UNEs)
- Maintenance/Repair for SR and UNEs

It also addresses the batch protocols and transport networks that will be used to exchange information for:

- Recorded Customer Usage for SR and UNE
- Wholesale Billing for SR and UNE
- Recorded Usage Receivables for UNE
- Local Account Maintenance for SR and UNE
- Directory Assistance Database

The preceding list of information to be exchanged is intended to be exemplary and does not represent a comprehensive list of such information to be exchanged between the parties.

- 4.2 CLEC and Qwest will use at least one method of exchanging preorder information which will be real-time transaction-based. CLEC and Qwest may also assess and determine the arrangements and conditions to support Batch file transmittal for certain types of preorder information related to the Street Address Guide and Switch/Feature/Facility availability.

5. System Interfaces

- 5.1 For Pre-order, Order and Provisioning, an exchange protocol, such as that based upon a subset of Common Management Interface Protocol (CMIP) transactions referred to as Electronic Communications-Lite (EC-Lite), will be used to transport Electronic Data Interchange (EDI) formatted content. CLEC and Qwest will use a TCP/IP based transport network for the exchange of EDI transactions. CLEC and Qwest will translate ordering and provisioning requests from the Ordering and Billing Forum (OBF) forms into EDI transactions using mutually agreed to mappings. The Service Order Subcommittee (SOSC) of the Telecommunications Industry Forum/Electronic Data Interchange (TCIF/EDI) committee interpretations of the 850, 855, 860, 864, 865, 870, and 977 transactions, in accordance with the OBF forms, will be used to convey all the necessary data to connect, modify or disconnect local exchange services.
- 5.2 For Maintenance and Repair, the CMIP transactions referred to as Electronic Bonding - Trouble Administration (EB-TA) will be used. CLEC and Qwest will use an X.25 transport network which is the currently defined standard.
- 5.3 For Billing, CLEC and Qwest will use EDI 811 and OBF Billing Output Specification (BOS) formats via CONNECT:Direct. Section 13 further defines the conditions when one or the other format will be used.
- 5.4 For Local Account Maintenance (LAM), CLEC and Qwest agree to use CONNECT:Direct.
- 5.5 For Directory Assistance Database Information, CLEC and Qwest agree to use a batch protocol and transport network that is yet to be determined and will be addressed in the Joint Implementation Agreement (JIA) described in Section 18 of this Attachment.
- 5.6 Modifications to OBF forms that are required due to the absence of, or existence of unnecessary data fields, contents, or formats will be addressed in the Joint Implementation Agreement described in Section 18 of this Attachment ("JIA").

6. Real Time Performance

- 6.1 The pre-order real time interface will support the CLEC customer contact as executed within CLEC's Sales and Service Centers. Gateway-to-gateway query-response cycle time performance requirements will be specified as part of the Joint Implementation Agreement described in Section 18 of this Attachment.
- 6.2 The transaction response time Qwest provides to CLEC Sales and Service Center will be equal in quality with that which Qwest provides to itself or other telecommunications carriers. For purposes of this Attachment, Qwest agrees to provide CLEC benchmarking information for end-user performance based on transaction volumes (nominal - light volume, standard - typical volume, and worst case - heavy volume)CLEC. CLEC may request an improvement in the transaction response time Qwest provides to CLEC's Sales and Service Center above that which Qwest provides to itself or other telecommunications carriers

through the Bona Fide Request process (as that process is defined in the Part A of this Agreement) should cycle times not meet CLEC's business requirements.

7. Compliance with Industry Standards

- 7.1 CLEC and Qwest agree to discuss the modification of these interfaces based upon evolving standards (e.g., data elements, protocols, transport networks, etc.) and guidelines issued by or referenced by relevant Alliance for Telecommunication Industry Solution (ATIS) committees. Establishment of new, or changes to, industry standards and guidelines will be reviewed on no less than an annual basis commencing on the Effective Date of this Agreement. This review will consider standards and guidelines that have reached final closure as well as those published in final form. Both parties agree to evaluate evolving standards and mutually determine the relevant modification to be implemented based upon the latest approved version adopted or the latest version reflecting final closure by the relevant (ATIS) committee or subcommittee. The parties will use reasonable effort to reach closure upon the necessary changes within no more than three (3) months of initiating each review and to implement the changes within nine (9) months or earlier, if reasonably possible, unless there is mutual agreement to a different implementation schedule.
- 7.2 In the course of establishing operational ready system interfaces between Qwest and CLEC to support Local Service delivery, CLEC and Qwest may need to define and implement system interface specifications that are supplemental to existing standards. Where mutually agreed to, CLEC and Qwest will submit such specifications to the appropriate standards committee and will work towards its acceptance as a standard.

8. Scheduled Availability

- 8.1 CLEC and Qwest agree to an operational/production readiness **as soon as possible with a target date of November 1, 1997¹** for the delivery of all systems interfaces described within this document, with the mutual understanding that (1) product delivery content is dependent on requirements definition and the time required to develop to these requirements and (2) operational readiness is dependent upon satisfactory test results for the transaction volumes projected by CLEC. CLEC and Qwest agree to work to mutually identify, prioritize and track those functions which may need to be positioned in a subsequent systems interface delivery. These functions will be jointly reviewed to define the time frame for development of subsequent releases of the system interfaces and establish mutually agreeable delivery dates.
- 8.2 CLEC and Qwest agree that project schedules, timelines, milestone deliverables, reporting processes, among others, will be specified in the Joint Implementation Agreement (Section 18). These schedules and deliverables will be reviewed and revised as needed as part of regularly scheduled meetings conducted throughout the development/implementation cycle.

¹ Arizona Bench Order, May 28, 1997 Hearing, p. 1508.

9. Pre-Order

- 9.1 The Parties agree that the exchange of preordering information for resale services and for services provided using UNEs will be transmitted over the same interface.
- 9.2 CLEC and Qwest will establish a transaction-based electronic communications interface based upon the most current (as of the Effective Date of this Agreement) version of the Service Order Subcommittee (SOSC) implementation guideline for Electronic Data Interchange (EDI). An exchange protocol, such as Electronic Communications-Lite (EC-Lite) will be used to transport EDI formatted content necessary to perform inquiries including but not limited to: switch/feature/facility availability, address verification, telephone number assignment, appointment scheduling, and customer service record requests. Without limiting other restrictions which may apply, customer service records are provided for the limited purpose of supporting the resale of Qwest local exchange services by CLEC or the sale of unbundled elements on behalf of that Customer. The use of records in a manner not associated with the ordering process, is expressly forbidden, and is a violation of the terms of this Agreement.

10. Order and Provisioning

- 10.1 When CLEC is the customer of record for the resold local exchange service(s), the exchange of information relating to the ordering and provisioning of local exchange service will be based upon the American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 Standards as documented by the SOSC of the Telecommunications Industry Forum/Electronic Data Interchange (TCIF/EDI) committee. The Implementation Guidelines for Electronic Data Interchange EDI Guidelines Customer Services Issue 7 will be used as a baseline for implementation despite the fact that this document may not have reached final approval stage by the Effective Date of this Agreement. An exchange protocol, such as EC-Lite will be used to transport EDI formatted content. The information exchange will be forms-based, using Local Service Request (LSR) Form, End User Information Form, and the Resale Service Form developed by the OBF as specified in the August 1996 version of the OBF forms in Bellcore SR STS-4710XX, and for Directory Listings, included with a local service request, as specified in SR STS-471102.
- 10.2 The end-user specific UNE order will be based upon OBF LSR forms. The applicable SOSC implementation guidelines described previously also apply to the End-user Specific Provisioning UNE orders. Qwest and CLEC agree that the information exchange will be forms-based using the Local Service Request Form, End User Information Form, Loop Service Form (which may ultimately be renamed the Loop Element form) and Port Form (which may ultimately be renamed the Switch Element Form) developed by the OBF. End-user-specific Network Elements, or Combinations thereof, to be supported in UNE orders shall be as permitted in this Agreement for unbundled Network Elements and subject to FCC and state regulatory requirements.
- 10.3 Subject to regulatory direction or mutual agreement relative to the requirement of providing combinations of UNE components, CLEC and Qwest will establish a method to relate, track and process as a single entity the individual Qwest-

provided End-user-specific UNE components specified at the time of the initial order.

- 10.4 CLEC and Qwest will use the same transaction-based protocol, such as EC-Lite, and transport network specified for service resale for End-user specific UNE orders.
- 10.5 The ordering of common use (non-end-user-specific) UNEs, as may be permitted under this Agreement for unbundled elements and subject to FCC and state regulatory requirements, will be supported by a process separate from that described in the preceding paragraphs for end-user-specific UNEs, such system to be the same or similar to the mechanized process used for trunk service requests or another process or system as appropriate and determined by mutual agreement. Unless Qwest is otherwise required by CLEC, this process will not employ the electronic interfaces specified in this Attachment, unless modified by separate agreement. Qwest will support, if and to the extent required by law, this Agreement or as mutually agreed to, Interconnection and operation of End-user-specific UNEs used in combination with common use UNEs. The systems and ordering process as outlined herein is separate and apart from the Bona Fide Request process agreed to by the parties. The Joint Implementation Agreement (Section 18 of this Attachment 6) will address the details related to defining a mechanism to correlate End-user-specific UNE orders placed via system interfaces with Common Use UNEs that may have been previously ordered.
- 10.6 Qwest will accept an 860 transaction that contains the complete refresh of the previously provided order information (under the original 850 transaction) simultaneously with the delivery of supplemental (new/revised) information from CLEC, subject to mutually agreed upon business rules. This treatment with respect to the 860 transaction will be accepted by both parties until the SOSC explicitly clarifies the information exchanges associated with supplementing orders, or CLEC and Qwest mutually agree to change the treatment.

11. Maintenance and Repair

- 11.1 The exchange of maintenance and repair information, for both Qwest retail local exchange services to be resold by CLEC and for services CLEC provides using a Qwest UNE or combinations of Qwest UNEs, will be transmitted over the same interface.
- 11.2 For the purpose of exchanging fault management information, CLEC and Qwest will establish an electronic bonding interface, based upon ANSI standards T1.227-1995 and T1.228-1995, and Electronic Communication Implementation Committee (ECIC) Trouble Report Format Definition (TRFD) Number 1 as defined in ECIC document ECIC/TRA/95-003, and all standards referenced within those documents. The parties will use the functions currently implemented for reporting access circuit troubles. These functions include, but are not limited to: Enter Trouble, Request Trouble Report Status, Add Trouble Information, Modify Trouble Report Attributes, Trouble Report Attribute Value Change (AVC) Notification and Cancel Trouble Report, all of which are fully explained in ANSI T1.227/T1.228-1995. Additional functions not currently implemented by the parties or defined by the standards may be supported by mutual agreement (e.g. Test Access and Trouble History).

- 11.3 Modifications that are required due to the absence of, or existence of unnecessary data fields, contents, or formats will be addressed in the Joint Implementation Agreement (JIA) described in Section 18 of this Attachment 6.

12. Recorded Customer Usage

- 12.1 Qwest will record the mutually agreed upon Customer usage data that CLEC requires for its retail local service Customers. The content of such data will be based upon a mutually agreeable interpretation of the BellCore Exchange Message Record (EMR) format to be documented within the JIA. Qwest will provide electronic transmission of the recorded data using CONNECT:Direct daily on Monday through Friday on a schedule to be determined in the Joint Implementation Agreement (excluding holidays). This interface and format will be used to deliver recorded usage when CLEC is reselling retail local exchange services of Qwest and when usage is associated with Customers served by CLEC through one or more UNEs provided by Qwest. CLEC and Qwest will mutually agree upon the conditions when Customer usage data recording will be provided on behalf of CLEC.

13. Billing Format for Service Resale (SR) and Unbundled Network Elements (UNE) Payables

- 13.1 Billing information for unbundled loop and port elements that are flat-rated will be provided in a single EDI 811 format across all Qwest regions via Connect:Direct. Billing information for unbundled trunks/interoffice transport elements that are flat-rated will be provided in a BOS format via Connect:Direct and will appear in the Customer Service Record of the facility bill. Billing information for SR products and services that are flat rated will be provided in a single EDI 811 format across all Qwest regions via Connect:Direct. Exceptions include, but are not limited to, frame relay which will be provided in a BOS format via Connect:Direct. The display of rating codes and the associated charge will be mutually agreed upon in both formats. Charges associated with a specific loop will reflect the circuit ID format.
- 13.2 For usage-rated billing, Qwest will issue bills to CLEC for SR/UNE in the formats described under the flat-rated SR/UNE billing section. Usage-rated billing for SR/UNE will be uniquely identified and displayed in the Usage Sections of the bill. For products using BOS format, jurisdiction will be specified per BOS guidelines. Conversation time, by chargeable traffic type, will be displayed and billed per applicable tariffs. Delivery of usage-rated SR/UNE bills will be provided as described under the flat-rated SR/UNE billing section.
- 13.3 UNEs which Qwest agrees to provide, under the terms and conditions of the Agreement, or to the extent required by law, that are recombined as a single service, will be grouped together by Qwest and displayed together on the bill.

14. Recorded UNE Local or Access Usage Receivables

- 14.1 Qwest will record all agreed upon originating and terminating usage billed to and associated with a UNE provided by Qwest to CLEC. The usage recorded will be in the same BellCore Exchange Message Record format discussed within Section

12 and will be subject to the same terms and conditions for modification and/or replacement of the format as discussed in Section IX.

- 14.2 CLEC and Qwest will mutually agree upon the Local and Long Distance access customer usage data recording that Qwest will provide to CLEC consistent with FCC and State regulatory guidelines and requirements, so that CLEC may bill other carriers for the local and exchange access usage charges to which CLEC is entitled, if any. CLEC and Qwest will perform mutually agreeable systems testing, as documented in the Joint Implementation Agreement (Section 18), **as soon as possible with a target date of November 1, 1997.**²
- 14.3 Qwest will provide electronic transmission of the recorded usage using CONNECT:Direct daily on Monday through Friday on a schedule to be determined in the Joint Implementation Agreement (excluding holidays). The same or similar interface used for delivery of recorded customer usage, discussed in Section 12, will be used for delivery of the recorded usage discussed in this section.

15. Local Account Maintenance

- 15.1 When acting as the switch provider for CLEC, where CLEC either is reselling retail services of Qwest or employing UNEs to provide local service, Qwest will notify CLEC whenever the local service Customer transfers service from CLEC to another local service provider. Qwest will provide this notification via CONNECT:Direct using a mutually agreeable 4-digit Local Use Transaction Code Status Indicator (TCSI) that will be used to indicate that the retail customer is terminating local service with CLEC. This notice will be provided on the next processing day after implementing the transfer, where processing days are Monday through Friday (excluding holidays). The TCSI, sent by Qwest, will be in the 960 byte industry standard CARE record format.
- 15.2 CLEC and Qwest will process account changes that affect only the pre-subscribed intraLATA and/or interLATA toll provider (PIC) via a change service order form using the same EC-Lite transaction based protocol and transport network employed for ordering resale service as specified in Section 10.
- 15.3 When appropriate regulatory guidelines exist, Qwest will use the industry standard CARE message TCSI 3148 to reject an IXC initiated change of the Primary Interexchange Carrier (PIC), where Qwest is the switch provider either for the retail local services of Qwest that CLEC resells or UNEs of Qwest that CLEC employs in providing service.
- 15.4 Agreement by Qwest and CLEC to the Local Account Maintenance described above does not, in any way, set a precedence or remove any obligation for Qwest and CLEC to work towards an industry solution for supporting customer movement between and among other ILECs and CLECs.

16. Directory Assistance Database

- 16.1 CLEC and Qwest will use a batch protocol and transport network to exchange

² Id.

Directory Assistance Database information similar to existing Qwest listings products (i.e., DA EUSL, DA EUSL Updates). The specific protocol and transport network to be used has not been determined or mutually agreed to and will be specified in the JIA.

- 16.2 Without limiting other restrictions which may apply, directory service Listing products are provided for the limited purpose of supporting provision of services as outlined in this Agreement. The use of Listings in a manner not associated with this use, is expressly forbidden, and is a violation of the terms of this Agreement.

17. Testing and Acceptance

- 17.1 The Parties will test the interfaces developed under this Attachment. The intent of the end-to-end integrity testing is to establish, through the submission and processing of test cases, that transactions agreed to by CLEC and Qwest will successfully process, in a timely and accurate manner, through both parties' supporting OSS as well as the interfaces. Irreconcilable differences regarding the interpretation of operational status of the interfaces will be handled through the Dispute Resolution Process as defined in Section 27 of Part A of this Agreement.
- 17.2 An interoperability testing suite shall ensure the implementation of functions, capabilities, and acceptance criteria enumerated in the JIA, with both Parties agreeing to resolve any material defects in the software.
- 17.3 The test process shall include a series of tests in which the transactions, representative of the predominant business transactions associated with local customer servicing, are performed side-by-side using the mediated access gateway interface to Qwest Legacy systems and the Legacy system interface utilized by Qwest service representatives and repair attendants. The purpose of this series of tests will be to verify that the performance and response times visible to a user of the mediated access gateway for nominal and worst case scenarios with the same level of quality in accordance with the Act.
- 17.4 Qwest does not warrant that its systems and access to those systems will be error-free.
- 17.5 Products and services already billed via the Integrated Access Billing System (IABS) will be included in the existing pre-bill certification process for general availability and a re-certification process conducted in accordance with current practices. For products and services billed outside of IABS, the parties will work towards establishing a mutually agreed upon pre-bill certification process.
- 17.6 CLEC and Qwest agree that metrics are required in order to monitor the performance and assure the on-going delivery of non-discriminatory access to Qwest systems for pre-order/ordering/provisioning, maintenance/repair, billing, and Directory Assistance databases. A performance measurement plan that addresses the definition, measurement, and review of quality, timeliness, accuracy and availability of each interface and associated transactions or files will be jointly developed and documented within the JIA for each interface.
- 17.7 CLEC and Qwest agree to periodic status meetings to review the overall progress

toward introducing fully operational interfaces capabilities, **as soon as possible with a target date of November 1, 1997.**³

- 17.8 Results of testing shall be considered Confidential Information, except that such results may be provided pursuant to this Agreement and law.

18. Joint Implementation Agreement Development

- 18.1 CLEC and Qwest recognize that the preceding provisions are not sufficient to resolve all, technical and operational details related to the interfaces described. Therefore, CLEC and Qwest agree to document the additional, technical and operational details in the form of a Joint Implementation Agreement (JIA). The purpose of the JIA is to establish the working details of the systems interfaces between the two parties, and as such, they will not be submitted to the Commission for approval as amendments to this Agreement. These JIA may be modified, by mutual agreement, over the life of the Agreement without subjecting the balance of the Agreement to renegotiation or modification.
- 18.2 Both parties further agree that any technical, operational or implementation issues directly associated with the systems interfaces, once identified at the working team level, may be escalated by the initiative of either party thirty (30) days after an issue is identified. The escalation will proceed first to the senior management of both companies who will seek to resolve the issue. Within fourteen (14) days of the Effective Date of this Agreement, CLEC and Qwest will document the agreed upon escalation process including the names and contact information of responsible senior management. If an issue is not resolved within thirty (30) days following receipt of the issue by senior management, either party may submit the issue to the Alternative Dispute resolution process contained in Section 27 of Part A of this Agreement.
- 18.3 CLEC and Qwest will document an overall project implementation schedule within sixty (60) days of the Effective Date of this Agreement. This schedule will be mutually binding and can be modified by mutual consent.
- 18.4 In addition, CLEC and Qwest agree to document both a topical outline for the JIA, and establish a schedule for identifying, discussing, resolving and documenting resolution of issues related to each aspect of the JIA topical outline for each interface discussed in this document. In no case will either end-to-end integrity testing or load testing begin without both parties mutually agreeing that each interface JIA documents the intended operation of the interface scheduled for testing. In the event the parties cannot agree prior to one hundred and twenty (120) days of the operational/production readiness date for delivery of all system interfaces described within this Attachment, disputes over the sufficiency of documentation will be submitted to arbitration pursuant to the Alternative Dispute Resolution process contained in Section 27 of Part A of this Agreement.
- 18.5 By mutual agreement, specific paragraphs or entire sections of this Agreement may be identified and documented to serve the purpose described for the Joint Implementation Agreement for specific interfaces. Any issues identified and subsequently resolved through either the end-to-end integrity or load testing

³ Id.

processes will be incorporated into the impacted interface section of the JIA within thirty (30) days of issue resolution.

18.6 An illustrative outline for a JIA follows:

- Introduction
- Purpose of Joint Implementation Agreement
- Terms of Agreement
- "System" Interface
 - Business Process and Data Requirements
 - Overall Responsibilities
 - Identification & Definitions of Activities
 - Information To Be Provided Per Transaction
 - Process Information for Each Activity & Transaction
- Delivery Criteria
 - Data Standard
 - Message Protocol
 - Transmission Protocol
 - Destination
 - Frequency Of Data
 - Deviations to Generic Specification
 - Error Processing
 - Process for Notification of Late Transmittals
 - Escalation & Expedite Procedures
 - Transaction Response Times
 - File Format Specifications
 - Rules for the Physical Interface
 - File Structure
 - Data Format
 - Error Controls
 - Physical Tape Specifications
 - Site Information
 - Contact Person
 - Transmission Hours
- Testing
 - Cooperative Testing
 - Pairwise Testing
 - ETE Testing
 - Test Order ETE (Employees)
 - Future Testing Requirements
- Interface Metrics
 - Data Timeliness
 - Data Completeness
 - Data Accuracy
- Contact Information
 - Contacts/Escalation Contacts
 - Schedules for Center Operations (days/hours of Operation)
- Data Requirements
 - Retention of Data
 - Back-up and Recovery Procedures
 - Disaster Recovery
 - System Change Notification

- Guarding of Proprietary Data
- Reporting Information
 - Reports to be Generated
 - Frequency
 - Data Requirements
 - Transmission
- Change Control Process
- Issue Resolution Process
- Termination of Interface Notification

IMPLEMENTATION SCHEDULE

1. Local Service Resale

- 1.1 Within ninety (90) days of the Effective Date of this Agreement but no later than October 1, 1997, Qwest shall provide for resale all services designated in this Agreement. Once service is initiated in an area, the ordering and provisioning intervals will be as specified in this Agreement and/or adopted by the Commission.

2. Unbundled Network Platform (All Network Elements in Combination)

- 2.1 Within one hundred and twenty (120) days of the Effective Date of this Agreement, but no later than November 1, 1997, Qwest shall offer all services, Network Elements and any Combinations thereof designated in this Agreement. Once service is initiated in an area, the ordering and provisioning intervals will be as specified in this Agreement and/or adopted by the Commission.

3. Interconnection Trunking for Local Service

- 3.1 Upon the Effective Date of this Agreement, within thirty (30) days of a request by CLEC for trunking to specific locations, or such other time period as the Parties may mutually agree, Qwest shall provide interconnection trunk groups necessary for the mutual exchange of traffic or combined trunk groups as necessary or required for efficiency and interconnection billing to locations specified by CLEC. Such thirty (30) day period shall apply only to the provision of existing transmission facilities. Subsequent to the thirty (30) day period following the Effective Date of this Agreement, interconnection trunk orders shall be processed as specified in this Agreement and/or adopted by the Commission.¹

4. Ancillary Trunking

- 4.1 Within ninety (90) days after the Effective Date of this Agreement, but no later than November 1, 1997, Qwest shall provide:
- 4.1.1 E-911 Trunking in cooperation with CLEC;
 - 4.1.2 SS7 Interconnection and Certification in cooperation with CLEC; and
 - 4.1.3 Directory Listings Arrangements and Directory Assistance Interconnection.

5. Unbundled Loops

- 5.1 Within sixty (60) days after Collocation has been provided pursuant to the terms of this Agreement, Qwest shall provide unbundled loops at designated end offices. Subsequent unbundled loops should be made available pursuant to ordering intervals as specified in this Agreement and/or adopted by the Commission.

¹ Procedural Order, July 14, 1997, page 23.

6. Collocation

6.1 Collocation will be provided upon request pursuant to the terms and conditions of this Agreement.

7. Access To Poles, Ducts and Rights of Way

7.1 Access to Poles, Ducts and Rights of Way shall be provided upon request, pursuant to the terms and conditions of this Agreement.

8. Interim Number Portability

8.1 Interim Number Portability capabilities, as specified in this Agreement, shall be made available in specified locations ninety (90) days after the Effective Date and within appropriate service order windows thereafter. Interim Number Portability shall be capable of being ordered electronically with a target date of December 1, 1997.

9. Operational Support System

9.1 CLEC and Qwest agree to an operational/production readiness **as soon as possible with a target date of November 1, 1997²** or at such later date as the Parties may agree.

² Arizona Bench Order, May 28, 1997 Hearing, p. 1508.
January 12, 2001/msd/InternetCommerce-AZ.doc
CDS-001221-0031/C

7/18/97
(Adoption – CLEC – AZ)